

period of a week or even longer, although the weekly use of pondage is the more general practice.

Such use of pondage results in a greater hydro capacity to this system than could be obtained from the river flow alone.

Furthermore, the capacity requirements of the system [129] vary from day to day and are usually greatly reduced on Saturdays and Sundays so that the river flow for a seven-day period of low flow can all be used in a period of sixty or seventy hours during the week when the system loads are heaviest.

There is a further use of pondage which has a very real capacity value to the coordinated system in those low flow periods of the year, when all the hydro capacity is not required for hydro generation.

During such low flow periods, a portion of the reserve hydro capacity is always available to carry system load swings which require very little energy; while the idle hydro capacity can be started up from standstill, and fully loaded within a fraction of a minute, well before the steam plants in operation would get into trouble in the event of a major emergency, and long before it would be possible to steam up idle boilers or to load up steam turbines.

To provide such reserve capacity service by steam capacity would involve expensive standby losses and the operation of turbo-generators below their most efficient loadings.

Referring further to the use of pondage. The scheduling of water to be withdrawn can be done on a daily or weekly or longer cycle.

The amount of usable energy stored in the ponds over such cycle of use is actually greater than the total energy [130] available from the minimum experienced flow itself during a seven-day period.

This pondage can be used in emergencies to replace energy that had been counted on from steam capacity that may fail.

Experience has shown that the forced outage of several large steam units on a system of our size is an infrequent occurrence and of short duration.

Consequently, the pondage of the Holtwood and Safe Harbor plants can be relied upon for a large portion of the required system reserves.

Q. Mr. Spaulding, you have emphasized both the capacity and the energy values obtainable from resources of the Susquehanna River. Are there any other general services that have entered into your contractual relations?

A. Yes, there are. Penn Water and Safe Harbor have in several instances provided certain special facilities; in part for joint use with our customers and in part for the specific use of these customers.

Q. Do your contracts provide for specified payments in connection with such special facilities? A. Not always. However, within the last decade, there has been more general recognition in our own contracts, and in the contracts of utilities generally, of specified charges which are related to the special facilities provided.

[131] This is because it has been generally recognized that it is more equitable to consider the availability of these special facilities as a separate component of any contractual arrangement of rates or payments rather than to include the costs of special facilities as a part of one or more of the variable component rates or charges for capacity or for energy.

I should like to mention a few examples of special facilities provided by Penn Water and Safe Harbor for its customers.

The Pennsylvania Railroad desired to receive its power supply in the form of 25 cycle single phase power.

To provide this service required special facilities not readily usable for others. Consequently, the contract with the Pennsylvania Railroad provides for special charges which are based on the cost to the company making such

facilities available. Another example is the local facilities which are part of the S. T. Co. of Maryland's Highlandtown Terminal Substation in Baltimore.

Local distribution facilities were also provided until recently at Penn Water's Violet Hill Terminal Substation in York, Pennsylvania.

It was more practicable in these latter two instances for Penn Water to provide a portion of the local distribution facilities in its terminal substations than for the receiving companies to provide the equivalent facilities.

[132] Such arrangements simplified the installation as well as their operation and maintenance.

In the case of Highlandtown distribution facilities, there was, prior to 1931, a specified charge as a component part of the bill rendered, covering the annual costs, including operation and the maintenance of these facilities.

In the case of York terminal facilities, the annual charge for the local distribution facilities provided, was not separately billed, but the costs were incorporated in the component charges for demand and energy.

Q. Mr. Spaulding, do all of your present power contracts now have separate charges or rates for capacity, energy and special facilities? A. No; not in all of them, but each of these three separate services—capacity, energy and special facilities, was separately recognized when the contracts were negotiated and the rates or payments were established.

Q. Are there any other comments you would like to make regarding the segregation of these three services under your various power contracts? A. Yes; I should like to point out an economic fact in connection with these three services which is very often misunderstood.

Financial and statistical services, and many others, attempt to express the value or cost of a service in terms of [133] a simple rate, as so many mills per kilowatt hour of energy supplied. This is not a correct measure of the cost or value of electric service for most practicable pur-

poses, and certainly not for comparative purposes, unless the services rendered and the conditions of supply which are to be compared are very much the same in all their characteristics.

Such a method of comparison is most misleading when comparing our hydro contracts and the services rendered thereunder, inasmuch as these services to the several customers are quite dissimilar.

In fact, the attempt to compare even the trend of cost of service to the same customer over a period of years by the use of a simple rate, such as mills per kilowatt hour, may be equally misleading if there were changes in the conditions of supply, the load shape, the amount of service rendered, or the amount of special facilities used.

This conclusion, I believe, can be shown by referring again to Exhibit 8. The lower three charts on this diagram indicate the hydro capacity operated on each of the three days shown, such capacity being necessary or desirable for system purposes.

With reference to the middle and right-hand lower charts, the hydro capacity operated could have been reduced, had it not been needed, approximately to the line enclosing the green area representing actual hydro generation capacity.

[134] The energy actually generated by hydro in these three days varied greatly; the hydro energy available to the system for a low flow day, shown in the right-hand diagram, was only 25 per cent of the energy available on the high flow day, shown at the left.

On Saturdays and Sundays in low flow, it frequently happens that no hydro energy is used on the system although hydro spinning reserve may be furnished continually.

The hydro plant would be used to render a capacity service which would otherwise have to be supplied by a steam plant with appreciable standby losses.

Obviously, a mill rate based upon this capacity service in relation to zero generation would produce a rate of infinity mills per kilowatt hour.

○ The fallacy of the evaluation of hydro service in terms of a rate per kilowatt hour can also be explained in another way.

It frequently happens that during median or low flows, hydro energy is generated during the daylight hours, in part by use of pondage, and delivered to a customer at the time of its peak requirements, thereby replacing on that company's system the maximum amount of high cost steam energy.

Yet, during the balance of the same day, that same customer may return to Penn Water the same quantity of energy measured in kilowatt hours, for use by Penn Water in [135] supplying its other firm power obligations.

Such backfeed energy would come from relatively efficient steam equipment at low cost to the customer.

In this situation the customer benefits directly by the difference between the cost of generating at the time of system peak with inefficient equipment, and the cost of generation off-peak on his most efficient equipment, yet without receiving from the hydro companies any net energy for that day. Any rate charged to that customer for this service would again be infinite if based upon mills per kilowatt hour of net delivery and would not be a satisfactory or proper approach to this.

[142] By Mr. MYSE:

Q. Mr. Spaulding, with reference to the special facilities provided by Safe Harbor and Penn Water for their customers, you stated that certain of these facilities were owned by Steco [STCo.] of Maryland, did you not? A. Yes, all such transmission facilities in the State of Maryland are owned by Steco [STCo.] of Maryland, which is a wholly owned subsidiary of Penn Water.

Q. Will you please explain the contractual relations between Penn Water and Steco [STCo.] of Maryland? A. Steco [STCo.] of Maryland was organized in 1910 as a wholly owned subsidiary of Penn Water, because of doubt as to the right of Penn Water as a Pennsylvania Corporation to own and operate transmission lines and substations in the State of Maryland. There are four separate agreements between Steco [STCo.] of Maryland and Penn Water.

. . .

[144] Q. Mr. Spaulding, will you state generally what these four agreements provide? A. The first, designated Item A is an agreement dated April 12, 1910, between Penn Water and Steco [STCo.] wherein Penn Water agreed to furnish the necessary funds for the work to be [145] undertaken by Steco [STCo.], including the construction of that portion of the transmission line between Holtwood, Pennsylvania, and Baltimore, Maryland, to be built in the State of Maryland, together with the Highlandtown Terminal Substation in Baltimore.

Steeco [STCo.] of Maryland agreed to mortgage its property and to deliver to Penn Water its bonds to be taken at 90 per cent of their face value in an amount equal to the funds to be advanced by Penn Water.

The second contract identified as Item B is an agreement dated April 3rd, 1911, between Penn Water and Steco of Maryland, under which the latter agreed to transmit and deliver power and energy of Penn Water and to operate and maintain its own transmission lines and substations, Penn Water agreeing to pay all expenses of Steco of Maryland and to waive the payment of interest by Steco of Maryland on its bonds.

Q. Have these two contracts been filed with the Federal Power Commission? A. Yes. The contract identified as Item B dated April 3rd, 1911, was filed with the Federal Power Commission on January 13, 1936 and designated as Steco rate schedule No. 1.

MR. GOLDBERG: Mr. Spaulding, if I may interject at this point? Who filed it?

THE WITNESS: Steco of Maryland.

[146] By MR. MYSE:

Q. Now, will you continue? A. The contract identified as Item A dated April 12, 1910 was similarly filed with the Commission and designated as Exhibit No. 1 to Rate Schedule No. 1.

Q. Will you please describe the other two agreements?

TRIAL EXAMINER: Before proceeding to do that,—who filed Item A? Steco?

THE WITNESS: Yes, sir.

MR. GOLDBERG: When you say "Exhibit 1 to Rate Schedule No. 1", do you mean Rate Schedule No. 1 in this proceeding as Item B?

THE WITNESS: Yes, sir.

By MR. MYSE:

Q. Now, will you continue to describe the other two agreements? A. The agreement dated March 19, 1931 identified as Item C is a contract between Penn Water, Steco and Baltimore Company.

Under this contract Penn Water agreed to advance to Steco of Maryland the money required to construct those sections in Maryland of the two transmission lines between Safe Harbor, Pennsylvania, and Baltimore, Maryland, and received therefor the stock of the transmission company. Steco of Maryland further agreed to operate and maintain these lines [147] and to transmit and deliver power and electric energy of Penn Water.

The agreement dated August 1st, 1932, identified as Item D, is a contract between Penn Water, Steco and Baltimore Company.

Steeco of Maryland agreed to construct, operate and maintain a switching station at Ellicott City, together with

extensions to its transmission lines from Ellicott City, Maryland, to Takoma Park, Maryland, and to transmit such power and energy as may be delivered to it. Penn Water agreed under both contracts to pay all expenses of Stco of Maryland.

Q. Have these latter two agreements been filed with the Federal Power Commission? A. Yes, the agreement dated March 19, 1931, was filed with the Commission on January 13, 1936, and designated as Stco of Maryland Rate Schedule No. 2, while the agreement dated August 1, 1932, was likewise filed and designated Supplement No. 1 to Rate Schedule No. 2.

Q. Are these two latter contracts, identified as Items C and D filed with the Federal Power Commission? A. Yes. The agreement dated March 19, 1931 identified as Item C was filed with the Federal Power Commission by Stco on January 13, 1936 and designated by the Commission as Stco Rate [148] Schedule No. 2, while the agreement dated August 1, 1932 and identified as Item D was likewise filed by Stco and designated by the Commission as Supplement No. 1 to Rate Schedule No. 2.

Q. Are all the present securities and open accounts of Stco of Maryland owned or held by Penn Water? A. Yes. However, Penn Water has waived all bond interest, dividends and other interests by the terms of the agreements above mentioned.

TRIAL EXAMINER: At this point, we had better clear the record on your motion and incorporate by reference, and let the Examiner state at this point in the record that the Susquehanna Transmission Company's rate schedule designated FPC No. 1 is incorporated in evidence as Item B by reference; Susquehanna Transmission Company Rate Schedule FPC No. 2 is incorporated as Item C by reference, and Exhibit 1 to Susquehanna Transmission Company's rate schedule FPC No. 1 is incorporated as Item A by reference, and Sup-

plemental No. 1 to Susquehanna Transmission Company's Rate Schedule FPC No. 2 as Item B by reference.

By MR. MYSE:

Q. Are all of the expenses of Steo of Maryland paid by Penn Water? A. Yes, they are.

Q. Does Steo have any power contracts other than those [149] just described and put in the record by reference?

A. No. Steo of Maryland has no other power contracts, nor does it at present deliver any energy directly to the public. It only transmits power and energy delivered to it by Penn Water or by Penn Water's customers under arrangements made by Penn Water to which Steo of Maryland is not a party.

Q. You have referred to the construction of Steo of Maryland of the lines between Holtwood and Safe Harbor on the one hand, and Baltimore and Washington on the other. Does Steo of Maryland own any other transmission facilities? A. Yes. Steo of Maryland constructed at the request of Penn Water the Maryland portion of a transmission line, extending from Safe Harbor, Pennsylvania, to Perryville, Maryland, for the supply of power to The Pennsylvania Railroad at Perryville and Conowingo, Maryland.

Steo of Maryland also has constructed at the request of Penn Water, a steel tower transmission line from Baltimore Company's Philadelphia Road Substation in Baltimore to the Gunpowder Switching Station in Baltimore County, and operates and maintains this line. This line is used exclusively by Baltimore Company and is a part of that Company's local transmission system. Penn Water is reimbursed for its cost and expenses for this line under its contract with Baltimore Company to be referred to later.

Q. Mr. Spaulding, you have referred to interchange sales [150] by Penn Water. Are such sales distinguishable from firm power sales? A. Yes, they are.

Q. With whom does Penn Water now have power contracts for firm power sales in Pennsylvania? A. Penn Water, jointly with Safe Harbor, has firm power contracts (1) with the Pennsylvania Power & Light Company for the supply of firm power to its Lancaster Division; (2) with the Philadelphia Electric Company for the supply of firm power to its Coatesville Division.

Penn Water, alone, has a contract with Metropolitan Edison Company for the supply of firm power at York. This latter contract with Metropolitan Edison Company superseded, as of January 1, 1946, a joint service contract under which Penn Water, Safe Harbor and Metropolitan Edison Company supplied firm power to the Edison Light and Power Company of York.

Q. Are the three existing contracts just referred to of the same general type? A. No, they are not. The first is a contract with a single component rate in which the charges for capacity, energy and special facilities are all lumped into a two step energy rate. The second contract has a three component rate with separate rates or charges for capacity, energy and special facilities, while the third contract is of a new type, particularly applicable to the type of service that can be [151] rendered advantageously by a hydro company such as Penn Water.

Under this latter contract, Penn Water obligates itself to provide a specified amount of peak service capacity and with energy commitments generally related to the actual stream flow. The special facilities component of this contract is included at present in part as a component of the capacity charges and in part as a special facilities charge.

Q. Why are these three contracts of such different types? A. These contracts were originally designed over a period of years, to meet the special requirements of the respective customers, and, as is frequently found in wholesale bulk power contracts, the purchasing companies desired forms of contracts with varying provisions as to fuel rate adjustment, the inclusion and determination of

billing demands, et cetera, that more nearly conformed to the practices and rate structures within the territories being served by the purchasing utility. Such different requirements are one element of the competitive situation that Penn Water had and must face in negotiating future contracts with its customers.

Q. Mr. Spaulding, have you prepared a tabulation showing the kilowatthour sales to these Pennsylvania customers under your firm power contracts with them, together with the revenues received by Penn Water for all firm power services [152] rendered to each of such customers? A. Yes, I have.

MR. MYSE: I would like to have marked for identification as Exhibit 9 a document entitled "Pennsylvania Water & Power Company Kilowatthour Sales to and Revenue Received from Pennsylvania Firm Customers".

TRIAL EXAMINER: That document may be marked as Exhibit 9 for identification.

(The document above referred to was marked Exhibit No. 9 for identification.)

By Mr. MYSE:

Q. Mr. Spaulding, will you please describe this exhibit which has just been marked for identification as Exhibit 9? A. Exhibit 9 shows the total firm power sales in kilowatthours and the total revenues received for all firm power services rendered to these Pennsylvania customers for the years 1944 and 1945, together with the estimated kilowatthours sales and estimated revenues from our firm power customers for the year 1946.

To the extent that such sales in 1946 would vary with fluctuations in river flow, it has been assumed that average river flow would be experienced for each of the twelve calendar months.

Q. Mr. Spaulding, when you have referred to your firm power customers in Pennsylvania, have you included any portion [153] of the supply by Penn Water or Safe Harbor to the Pennsylvania Railroad for the latter's use either in Pennsylvania or Maryland? A. No, I have not.

Q. Do you consider the power supplied by Penn Water and Safe Harbor to The Pennsylvania Railroad in the State of Pennsylvania as a firm power commitment of the Penn Water and Safe Harbor Companies? A. Yes, I do. The contract obligation for the total supply of capacity, energy and special facilities to The Pennsylvania Railroad is a joint obligation of Penn Water, Safe Harbor and Baltimore Company.

For the purposes of inter-company accounting and for reports to regulatory authorities, the supply of capacity and energy to the railroad in the State of Pennsylvania is considered as being supplied by Penn Water, while the supply of capacity and energy in the State of Maryland is considered as being supplied by Baltimore Company, but such intercompany accounting and reporting does not affect the joint nature of the obligations under the terms of the contract. The Potomac Electric [Power] Company is also a party to this contract but by specific provision of the contract is not obligated to provide generating capacity on its own system for such purpose.

7
MR. MYSE: I ask to have identified for the record as [154] Exhibit No. 10 a composite form of contract between Pennsylvania Railroad Company and the Consolidated Gas Electric Light and Power Company of Baltimore, Pennsylvania Water & Power Company, Safe Harbor Water Power Commission [Corporation] and Potomac Electric Power Company.

TRIAL EXAMINER: The document may be marked Exhibit 10 for identification.

(The document referred to was marked Exhibit No. 10 for identification.)

By MR. MYSE:

Q. Mr. Spaulding, do you have before you a copy of the composite form of Pennsylvania Railroad contract just identified as Exhibit 10? A. Yes, sir.

Q. I ask you if this is the power contract that you just referred to? A. Yes, it is.

Q. Will you please state the date of the original contract and the dates of the supplemental agreements incorporated in this composite form? A. This composite form of the Pennsylvania Railroad contract has been prepared for general corporate and operating use, and includes all of the present terms of the original contract of September 2nd, 1931, between the Pennsylvania Railroad Company, Penn Water Company, Safe Harbor and Baltimore [155] Company, together with all of the terms and conditions of the supplemental agreement thereto of August 15, 1934 by which Potomac Electric Power Company was added as a party, and also includes all of the terms and conditions of the second supplement to this contract dated June 22nd, 1938.

[156] Q. Will you please describe the operations under this contract? A. By reason of the provisions of this agreement, the services to the Railroad are rendered jointly by Penn Water and others.

The contracts provide for supply of power and energy to The Pennsylvania Railroad electrification, including the main line of its Philadelphia, Baltimore and Washington Railroad from Perryville, Maryland, to Washington, D. C., on the passenger and freight lines of the present Philadelphia Division between Thorndale, Pennsylvania, and Harrisburg and Enola, Pennsylvania, on the Columbia and Port Deposit Railroad from Columbia, Pennsylvania, to Perryville, Maryland, and yards adjacent thereto and supporting these services.

Power is supplied to the Railroad at Benning, D. C., adjacent to a power plant of Potomac Electric Power Company, at the end of a transmission line and taps therefrom

owned and operated by Penn Water and S. T. Company of Maryland, at Perryville and Conowingo, Maryland, and at Fishing Creek, Pennsylvania; and at Safe Harbor, Pennsylvania, at a substation of Penn Water located adjacent to the Safe Harbor hydroelectric development.

Power supply to the Railroad is in the form of 25 cycle, single phase, power at these several points.

Q To supply such special services, Safe Harbor obligated [157] itself to provide special generating and frequency changer facilities, Penn Water obligated itself to provide substation and transmission facilities and Potomac Electric Power Company obligated itself to provide frequency changer facilities.

The contract provisions include as separate components of the payments to be made for services thereunder (1) a fixed demand charge, (2) a two step energy rate and (3) specified payments for special facilities, generally based on the cost to the Company providing such facilities.

Q. Mr. Spaulding, what is the character of the rates charged for services rendered under this contract? A. The demand charge component is a single rate applying to the total demands of the Railroad supply at the several supply points referred to above, including those in the States of Pennsylvania, Maryland and the District of Columbia.

The energy charge component is a two step energy rate applying to the total energy delivered to the Railroad under this contract, and for such purpose the total energy is computed as though it were all delivered at a single supply point.

Q. Mr. Spaulding, how are the revenues divided between the several parties serving the Railroad under this contract? A. The Railroad contract itself makes no provision for any such division. On the contrary, it provides that a [158] single bill shall be rendered by and payments made to Baltimore Company, acting for itself and the other supplying companies to this contract.

Q. Mr. Spaulding, are any of the Pennsylvania Railroad revenues received by Baltimore Company divided with Penn Water? A. Yes; they are divided in accord with intercompany contracts.

MR. MYSE: I would like to have identified as Exhibit No. 11, a document entitled "Memorandum to Mr. H. A. Wagner, Mr. J. A. Walls—re: Allocation of PRR load between Maryland and Pennsylvania:" together with two letters dated September 9, 1937 and between the two gentlemen just mentioned. So the Record will be clear, both letters are dated the same date.

TRIAL EXAMINER: All these documents are stapled together?

MR. MYSE: They are.

TRIAL EXAMINER: The documents, so stapled, will be marked Exhibit No. 11 for Identification.

(The documents referred to were marked Exhibit No. 11 for Identification.)

By MR. MYSE:

Q. Mr. Spaulding, you have before you the document which has been identified in the Record as Exhibit No. 11? [159] A. Yes.

Q. And that is the intercompany arrangement, or the memorandum to which you have just referred? A. It is.

Q. Will you please explain how this arrangement is carried out? A. An Operating Committee made up of a representative each from Penn Water and Baltimore Company, recommended in this memorandum a method of division of the Pennsylvania Railroad revenues as between Baltimore Company and Penn Water.

The accompanying letters which have been identified as a portion of the Exhibit approved this recommendation of the Operating Committee.

The memorandum recommends that the total revenues from the Pennsylvania Railroad, including charges for

special facilities; be divided between Baltimore Company and Penn Water in proportion to the kilowatt-hours delivered to the Railroad in Maryland (including the District of Columbia) and Pennsylvania, respectively.

This memorandum has been the basis of division of Railroad revenues between Penn Water and Baltimore Company to date. The division so recommended was proposed because the records required were readily available, the method a simple one, and because any inaccuracy in the division so made would [160] affect only the gross revenues and not the operating income of the companies.

The division of revenues is not in proportion to the specific services rendered by each of the parties, nor to the cost or value of such services.

Q. How does Safe Harbor share in the division of such revenues? A. Safe Harbor does not share in the above-mentioned division of Railroad revenues directly, but through other contracts is assured the earnings on its investment made for services under the Railroad contract.

MR. MYSE: Mr. Examiner, I have a copy of an agreement dated June 1, 1931, between Safe Harbor Water Power Corporation, Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water and Power Company, together with supplemental agreements dated August 1, 1932 and November 22, 1939. I understand that all these agreements are likewise on file with the Commission, the designations of which will be identified by the witness in the Record.

I would ask that these agreements be incorporated into the Record by reference as Item No. E.

TRIAL EXAMINER: It is going to be necessary to give a separate letter item designation to each one of these as long as they stand in the file of the Commission as separate filings.

MR. MYSE: Then may we separate them, Mr. Examiner, as [161] E, F and G?

TRIAL EXAMINER: The witness is prepared to give the corresponding Federal Power Commission rate schedule file numbers, is he?

MR. MYSE: He is.

TRIAL EXAMINER: He can do that at the beginning of his testimony to avoid the handling which we had with the other items?

MR. MYSE: Yes, sir.

TRIAL EXAMINER: Very well, Item E, the agreement of June 1, 1931.

Item F is the supplemental agreement of August 1, 1932.

Item G will be the supplementary agreement of November 22, 1939. All of this is conditioned upon the numbers being given when ruled upon.

Proceed.

By MR. MYSE:

Q. Mr. Spaulding, you have before you the agreement dated June 1, 1931, between Safe Harbor Water Power Corporation, Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water and Power Company? A. Yes, sir.

Q. That being the agreement to which you have just referred? A. Yes, sir.

[162] Q. Have those agreements and the two supplements been filed with the Federal Power Commission by Penn Water? A. Yes, they have. The original contract of June 1, 1931, identified as Item E, providing for the sale of power and energy, transmission service and payments therefor, was filed with the Federal Power Commission by Penn Water on January 13, 1936, and designated as Federal Power Commission Rate Schedule No. 8.

The supplement to this agreement, dated August 1, 1932, and designated Item F, covering an agreement by Penn Water to directly or indirectly through S. T. Company extend its transmission system to interconnect with Potomac Electric Power Company, was similarly filed with the Federal Power Commission as supplement No. 1 to Rate Schedule No. 8.

The second supplement to the agreement, dated November 22, 1939, identified as Item G, covering authorization for installation of Unit No. 1 in the Safe Harbor project, was filed with the Federal Power Commission on December 7, 1939, designated Exhibit A to Federal Power Commission Rate Schedule No. 8.

MR. MYSE: I ask that the contracts just identified be incorporated into the Record by reference.

TRIAL EXAMINER: Any objection?

MR. GOLDBERG: No objection.

TRIAL EXAMINER: Items designated E, F and G are [163] incorporated in the Record by reference.

(Items designated E, F and G were thereupon incorporated in the Record by reference.)

By MR. MYSE:

Q. Mr. Spaulding, have you prepared a tabulation showing the volume of services to The Pennsylvania Railroad under the Railroad contract, heretofore identified as Exhibit 10, indicating thereon the division of these services to the Railroad in the States of Pennsylvania and Maryland, including the District of Columbia, for the years 1944 and 1945? A. Yes, I have.

MR. MYSE: I ask that the document entitled "Services to Pennsylvania Railroad, Under Railroad Contract, and Division Between Maryland and Pennsylvania" be marked for Identification as Exhibit No. 12.

TRIAL EXAMINER: The document you want will be marked as Exhibit No. 12 for Identification.

(The document referred to was marked Exhibit No. 12 for Identification.)

[164] By MR. MYSE:

Q. Mr. Spaulding, you have before you the document which has been identified as Exhibit No. 12. A. Yes.

Q. Will you please state what this exhibit shows? A. This exhibit, No. 12, shows the total kilowatt-hours of energy delivered to The Pennsylvania Railroad in the States of Pennsylvania and Maryland (including the District of Columbia), respectively, for the years 1944 and 1945, based on the operating and billing records of the Company, and for the year 1946 based on the present estimates of load requirements of the railroad.

There is also shown on this exhibit, the installed single phase capacity, as water-wheel generators or frequency changers and their location. Such special facilities in Pennsylvania are owned and operated by the Safe Harbor Company, while the special facilities in the District of Columbia are owned and operated by the Potomac Electric Power Company.

In addition to the single phase generating equipment shown, Penn Water has installed as special facilities for service to the Railroad, (1) a transformer substation adjacent to the Safe Harbor hydroelectric development with transformer capacities totalling 80,000 kva., (2) a 13 kv. single phase bus with transformer and machine oil circuit breakers, including [165] provisions for additional transformer capacity in this substation, owned and operated by The Pennsylvania Railroad, and (3) a 32 mile steel tower line with four 132 kv. single phase circuits, owned and operated by Penn Water and its subsidiary, Steco of Maryland, extending from Safe Harbor, Pennsylvania, to Perryville, Maryland, with short connecting lines to substations

of the Railroad at Fishing Creek, Pennsylvania, and Conowingo, Maryland.

Q. Mr. Spaulding, have you prepared a tabulation showing the total revenues received from The Pennsylvania Railroad for services under the Pennsylvania Railroad contract, for the joint services in the States of Pennsylvania and Maryland? A. I have.

By MR. MYSE:

Q. Mr. Spaulding, have you also shown on this tabulation the division of the total net revenues received by Penn Water from Baltimore Company for services rendered by the Railroad Company in the State of Pennsylvania? A. I have.

MR. MYSE: I ask to have identified as Exhibit No. 13 [166] the document entitled "Total Revenues Received from Pennsylvania Railroad for Joint Services in Pennsylvania and Maryland and Division of Revenues Received by Penn Water."

TRIAL EXAMINER: The tabulation will be marked Exhibit No. 13 for Identification.

(The document above referred to was marked Exhibit No. 13 for Identification.)

[170] Q. Mr. Spaulding, looking over the record of yesterday, I find that you used the term "Penn Water was the only non-captive wholesale utility company in the United States," will you define with a little more particularity the use of that term? A. As I have used the term, "non-captive company", I have referred to a company whose stock is owned by the public and whose stock is neither controlled by nor owned by another public utility company.

Q. Do you have a copy of Exhibit 13 for Identification before you? A. Yes, sir.

Q. Will you please state the source shown on Exhibit 13 for Identification? A. The total revenues for joint

services to The Pennsylvania Railroad for the years 1944 and 1945 are from [171] the actual billing records prepared by Penn Water and submitted to the Railroad by Baltimore Company.

The revenues for 1946 are based on the estimated requirements of the Railroad for the current year. The division of the total revenues paid by Baltimore Company to Penn Water is taken from the intercompany billing records prepared in accord with the Operating Committee memorandum offered for identification as Exhibit 11.

Q. Mr. Spaulding, have you prepared a tabulation showing the special facilities provided for the supply of power to the Railroad under the Railroad Contract offered as and identified as Exhibit 10 indicating the specific payments made by the Railroad under the terms of that agreement for such facilities? A. I have.

MR. MYSE: I ask to have marked for Identification a document entitled "Specified Facilities and other special Facilities provided under terms of Railroad Contract" as Exhibit 14.

TRIAL EXAMINER: It may be marked for Identification as Exhibit 14.

(The document above referred to was marked Exhibit No. 14 for Identification.)

TRIAL EXAMINER: You may proceed.

[172] By MR. MYSE:

Q. Mr. Spaulding, you have before you the document which has been marked as Exhibit 14 for Identification. I ask you to please state what this Exhibit shows? A. There is shown on this exhibit each of the specified facilities provided under the Railroad contract, the payments made by the Railroad under the terms of the Contract, together with the ownership and location of such facility.

Q. Mr. Spaulding (sic), you have stated, have you not, that all revenues paid by the Railroad are paid to Baltimore Company? A. Yes, I have.

Q. Are any of the contract charges for special facilities paid directly to the owning companies? A. No, they are not.

Q. With reference to Exhibit 14 for Identification, will you please indicate how the owning companies are compensated for their investment and operation of these special facilities? A. The investments made by Safe Harbor for the facilities owned by it, and the operating expenses in connection therewith, are included together with all of its other facilities as the basis for the bills rendered by Safe Harbor to Baltimore Company and Penn Water Company under the Safe Harbor Contract, identified in this record as Item E.

[173] MR. GOLDBERG: That is E, F and G, isn't it?

MR. MYSE: I think that is correct.

THE WITNESS: That is correct; E, F, and G.

By MR. MYSE:

Q. Will you continue, please? A. In connection with such billing, Baltimore then pays Safe Harbor two-thirds of the cost of such special facilities provided by Safe Harbor for the Railroad, and Penn Water one-third.

Penn Water's one-third must in turn come in part from the allocated division of Railroad's revenues, as shown in Exhibit 13, and any remainder must come from Baltimore Company through the power agreement between Baltimore and Penn Water.

The investment made by Potomac Electric Power Company for special Railroad facilities and their operating costs are paid by Baltimore Company to Potomac Electric Power Company under the terms of the power contract between those parties.

Q. Are any of these special facilities for the Railroad owned or operated directly by Baltimore Company? A. No, they are not.

Q. Referring to Exhibit 14 for Identification, there appears near the bottom, a credit to the revenues received for special facilities for the rental and maintenance of the [174] 110 Kv. circuit between Patapsco Crossing and Benning, D. C.

Will you please explain this item? A. The Railroad Contract, Exhibit 10 in this proceeding, provides that the Railroad will make available to the supplying parties the transmission line built by the Railroad on its electrification structures between the Patapsco Crossing, a point on the outskirts of Baltimore, and the Benning plant of the Potomac Electric Power Company in Washington, for the use of the supplying companies in assuring ample transmission capacity between Baltimore Company and the Hydro Companies, on the one hand, and the Railroad frequency changer installed by Potomac Electric Power Company in its Benning plant, on the other hand.

The use of this latter facility was in recognition of the fact that Potomac Electric Power Company provided the Railroad frequency changer; but did not obligate itself to otherwise install generating capacity for the supply of power to the Railroad.

The negative payment of \$6,000 shown at the bottom of Exhibit 14, is a credit allowed under the terms of the Railroad contract for the use of this circuit.

Q. Mr. Spaulding, you have previously referred to interchange agreements, or arrangements, with your Pennsylvania customers, and you stated, did you not, that these interchange agreements are separable from the contractual arrangements for [175] the supply of firm power. A. That is correct.

Q. Are the contractual provisions for interchange and for firm power services incorporated in the same contracts?

[176] A. Not in every case, but as previously stated, the billing for interchange sales and purchases is separate and distinct from the billing for firm power and other services.

Q. What is the usual basis for accounting and billing for interchange transactions? A. Interchange sales and purchases are usually accounted for and billed on the basis of a division of the savings resulting from such transactions when the generation of energy at a lower cost plant on one system can be used to replace generation at a higher cost plant on another system.

The difference in cost of the actual generation and what it would have cost for the replaced generation, which is the resulting savings, is divided between the parties.

When energy is generated at a steam plant, the resultant savings on such transactions are usually divided between the generating and receiving companies on a 50-50 basis.

When energy is generated at a hydro plant that would not be needed by the hydro company in the supply of its firm power customers, it is the general practice for the hydro company to sell such energy at 70 per cent of the cost which the receiving company would have incurred in generating such energy itself.

Q. Now, are all interchange transactions made on such a replacement basis? [177] A. No, Penn Water's interchange contracts, in addition to providing for economy interchange transactions, also provide that the two parties shall assist each other under emergency conditions, to the extent possible without affecting other services or obligations of the assisting parties. Such provisions were particularly valuable during the recent war period when assistance was rendered on a daily and, frequently, on a weekly basis, by making energy and capacity available to a company that needed to maintain its limited generating resources, or by providing through such arrangements the necessary reserve capacity.

The interconnected companies very generally assisted each other in such a cooperative manner during the past five years.

The charges made for such services were as provided for under the interconnection agreements, and are usually based on the generating company's cost plus ten per cent.

Q. Mr. Spaulding, have you prepared a tabulation showing the volume of interchange transactions in 1944 and 1945? A. Yes, I have.

MR. MYSE: I ask to have identified as Exhibit No. 15 a document entitled "Pennsylvania Water & Power Company—Total Interchange Sales to and Interchange Purchases from Pennsylvania customers."

TRIAL EXAMINER: The document may be marked for [178] identification as Exhibit No. 15.

(The document above referred to was marked Exhibit No. 15 for Identification.)

By MR. MYSE:

Q. Mr. Spaulding, do you have before you the document which has been marked for identification as Exhibit No. 15? A. Yes.

Q. Will you please state what this exhibit shows? A. Exhibit No. 15 shows the total volume of interchange transactions with other Pennsylvania Utilities for the years 1944 and 1945, and as estimated for the year 1946, on the assumption that the river flow of the Susquehanna River would be normal for the year.

The kilowatt hour transactions are shown, together with the revenues received therefrom, and Penn Water's share of the savings on such transactions which were accounted for as described above.

MR. GOLDBERG: Are you about to pass Exhibit 15 for identification?

MR. MYSE: Yes.

MR. GOLDBERG: I wonder if I might inquire of the witness something about this exhibit so we will know how to read the exhibit correctly?

TRIAL EXAMINER: You may.

- [179] MR. GOLDBERG: Mr. Spaulding, under the third column for the year 1944 you show that Penn Water's share of savings was \$150,164, whereas under the interchange sales you show \$21,162 with reference to the purchases.

Do we add those two figures together in reading the exhibit to give us a total saving of \$171,000, in round figures?

THE WITNESS: That is correct.

MR. GOLDBERG: Thank you very much.

- [180] MR. MYSE: Mr. Examiner, I ask that the agreement between Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company dated December 31, 1927, together with supplemental agreement dated December 27, 1928, and June 1, 1931, be designated as Item H, to be incorporated by reference.

That another supplemental agreement between the same parties, namely, Consolidated Gas Electric Light and Power Company of Baltimore and Pennsylvania Water & Power Company, dated September 29, 1939, be designated as Item I, to be incorporated in the record by reference.

I propose to identify the filing numbers under which they were filed with the Federal Power Commission.

TRIAL EXAMINER: You will incorporate these by reference to the documents in the official files of the Commission?

MR. MYSE: That is correct.

MR. GOLDBERG: That is by reference, Mr. Examiner, not to the formal files of the Commission, because it is my impression that the rate contract filings are not a part of the formal files of the Commission.

TRIAL EXAMINER: No, as I indicated, this is by reference to the official files of the Commission.

MR. MYSE: I might say that in the printed copy of the agreement we have handed to the Examiner, the supplemental agreement of September 29, 1939, which I have asked to be [181] incorporated by reference as Item I, appears beginning at page 41.

TRIAL EXAMINER: Of this document you have handed the Examiner for his convenience?

MR. MYSE: That is right.

By MR. MYSE:

Q. Mr. Spaulding, will you please indicate for the record the power agreements between Penn Water and Baltimore Company, and state whether these contracts are on file with the Federal Power Commission? A. The agreement of December 31, 1927, between Baltimore Company and Penn Water, and the two supplements thereto of December 27, 1928, and June 1, 1931, identified as Item H, were filed by Penn Water with Federal Power Commission January 13, 1936, and designated by the Commission as Federal Power Commission Rate Schedule No. 1.

The supplement to these exhibits dated September 29, 1939—

Q. (Interposing) You mean the agreements? A. Yes. The supplement to these agreements dated September 29, 1939, and identified as Item I were filed by Penn Water with the Federal Power Commission on October 2nd, 1939, and designated by the Commission as Supplement No. 1 to Rate Schedule No. 1.

Baltimore Company and Penn Water are the only parties to [182] these agreements.

Q. Are there any other agreements of Penn Water involving services to Baltimore Company? A. Yes. There are two, main agreements now in effect which are interdependent and which set forth the contractual relations of Penn Water and Safe Harbor with Baltimore Company.

Both were the outgrowth of twenty years of experience by the two company in determining the best methods of promoting the coordination of the hydro and transmission facilities of Penn Water with the steam generating plants of Baltimore Company, to the end of maximum utilization of natural resources, minimumization of investment and the utmost in service availability to the ultimate customer.

Q. You have referred to two agreements with Baltimore Company? A. Yes.

Q. Are you referring to the three-party contract between Penn Water, Safe Harbor, and Baltimore, identified as Items E, F and G, as one of them? A. Yes. Under this agreement Penn Water and Baltimore Company became entitled to the entire output of the Safe Harbor plant and undertook to provide to Safe Harbor Company contractual return in addition to all of the expenses, the agreement identified as Item E and supplement thereto, identified [183] as Items F and G, also provided for the construction of transmission lines by Penn Water, in part for the delivery of Baltimore Company's share of the output of the Safe Harbor plant.

Q. What other agreement did you refer to? A. The other agreement, identified as Item H, and the supplement included as Item I, is the controlling instrument between Penn Water and Baltimore Company, expresses the basic policy governing the rendering of services by Penn Water and the payment of compensation therefor by Baltimore Company.

Q. What services are furnished under this agreement? A. This agreement as presently amended does not provide for the furnishing or delivery of any specified amount of capacity and energy. This agreement does provide on the

one hand that the Baltimore Company is entitled to all of the power and energy available to Penn Water from its own plants and from Safe Harbor and not disposed of to other customers of Penn Water, together with all savings that can be secured through coordinated system planning and through interchange transactions with adjoining systems by means of the transmission facilities of Penn Water.

On the other hand, it provides that Penn Water in return for allowing such participation by Baltimore Company in the most effective utilization of the power and transmission resources of Penn Water and Safe Harbor, is to receive compensation [184] from Baltimore Company predicated on the earnings theretofore established competitively by Penn Water in the field of wholesale power supply both to Baltimore Company and to the other customers of Penn Water.

[185] Q. How is the compensation under this contract related to the services furnished? A. The agreement with Baltimore Company established an initial level of compensation to Penn Water based on the revenues then being received by Penn Water from all of its customers, including Baltimore Company and related to the amount of energy available in an average river flow year, to be adjusted with variations in investment devoted by Penn Water for power production and transmission services.

This method of compensation to Penn Water provided for payments by Baltimore Company to be in the form of an annually determined payment independent of the number of kilowatts and kilowatt hours actually furnished in any particular year.

A similar plan of compensation was also adopted in the case of the payments which Penn Water and Baltimore Company make to Safe Harbor under the contract designated as Items E, F and G, each paying to Safe Harbor its contract proportion of its total specified amount consisting of the contract return plus expenses, such payments being in the same proportion as the contract entitlement of each

company and without regard to the actual amount or division of any capacity and energy actually furnished to each in any year.

The greatest advantage derived from this arrangement was the removal of all artificial barriers, which would interfere with the hour-to-hour, day-to-day, and the long-range [186] coordination of the power resources of the companies involved.

Such a goal had not been as fully achieved by Penn Water and the Baltimore Company in two decades of preceding power relations.

Q. Why was it not possible to obtain the full advantages of coordinated operation under the early contracts with Baltimore? A. The evolution of Penn Water's power agreements with its customers in Baltimore included the early extreme of a stipulated capacity service always available and price on a kilowatt-year basis, combined with additional energy sales at a stated mill rate during specified hours of the day.

Another form of sale was a stipulated capacity service combined with a limited amount of yearly energy at a stated mill rate to be taken at the customer's desires.

Neither form of contractual arrangement recognized the possibility of energy purchases in large volume during the periods of ample flow, nor the coordinated scheduling of the available steam resources in the interest of operating economy.

The first development in the improvement of hydro utilization was an arrangement whereby the customers began to purchase supplementary energy to replace their normal steam generation. This involved the demonstration that the customers could reduce their steam generation without impairment of the [187] reliability of their distribution service.

Because such hydro energy was viewed at first only as a substitute for steam energy, customers were not disposed to pay more for it than the mere incremental cost of

steam generation. Within a few years, however, the volume of supplementary energy being absorbed was greater than the amount of the so-called firm energy for which the customers had contracted, and the recognition began to develop that customers were able to derive a capacity value from such hydro supply in addition to its value as replacement energy.

Q. When did Penn Water's contracts first provide the necessary contractual incentive for coordinated operation?

A. Penn Water's power agreements with its customers in Baltimore and Pennsylvania, in the years up to 1931, had not yet developed a contractual incentive which would encourage the fullest coordinated utilization of the facilities and power resources of the several customers.

[188] Penn Water was always under the difficulty of establishing a contractual operating procedure with its customers which would permit its hydro resources to be used to the best advantage of the customers, and the steam plants of the customers to be used in the most economical fashion with regard to their own loads and the loads of other customers.

Necessarily, Penn Water had to deal individually with its separate customers, all of whom were inclined to view their own power requirements as matters distinct from the requirements of other customers.

Q. What recognition was given to the opportunities for coordinated operation under the 1927 contract identified as part of Item H?

A. By 1927, the contractual and operating arrangement with Baltimore Company had demonstrated the desirability of coordinated operation of the facilities of the two companies and the 1927 agreement, recognized and expressed this intent, but the past practice of stipulating capacity and energy services and the conditions under which they were to be available, was continued.

Detailed contractual provisions were utilized regarding hydro pondage regulation and the amount of permissible

steam generation by Baltimore Company in relation to load changes, capacity margins and minimum loads.

There were arrangements for the purchase by Penn Water [189] of steam energy from Baltimore Company and a credit by Baltimore Company to Penn Water in case of hydro losses occasioned by unnecessary steam generation.

Such provisions were intended to assure to Baltimore Company that the expected services would be received, and to assure to Penn Water that the maximum use would be made of its facilities and that the expected revenues would materialize.

Q. What were the character of the rates and charges under this 1927 agreement that you have referred to?
A. Specified payments for special facilities were provided for in connection with certain distribution facilities installed by Penn Water at its Highlandtown terminal substation, and a transmission line built by S. T. Co. of Maryland on its right-of-way, for the exclusive use of Baltimore Company.

The rate provisions included an adjustable specific capacity charge per kilowatt of one hour integrated peak service and a similar charge per kilowatt of swing and reserve capacity service in excess of the integrated peak supply.

These peak services were to be redetermined from time to time giving consideration to the actual and predictable changes in the amount and character of the loads of Baltimore Company and of Penn Water's other customers, installed generating capacities and availability, and in methods of operation.

[190] The separate energy rate was graded in three volume steps on an annual basis.

Q. Did this 1927 agreement accomplish the desired degree of coordination? A. No, it did not. Although this contractual arrangement, made for a long term undertook to broaden the scope of the cooperative utilization of the power resources of the two companies, and to avoid all unnecessary duplication of investment and operating cost,

it nevertheless still failed to promote the maximum coordinated use of the power resources of the respective parties.

Even before the problem of bringing the Safe Harbor project into the picture as a new generating source on the basis of cooperative ownership had been comprehended, the intricacies of the arrangements and the operating impediments arising from the accounting for energy of different classifications and rates and with varying capacity possibilities, had been recognized.

Q. Could Safe Harbor have been developed and operated under the 1927 form of contract? A. No, it could not. When an attempt was made to work out a contractual arrangement concerning the Safe Harbor project, it was believed that the previous thinking regarding appropriate mechanisms of power contracts would have to be materially modified if any workable procedure was to be [191] accomplished. The services rendered by Penn Water's and Safe Harbor's generating plants would in certain respects be similar although differing in volume; yet, for the reasons stated by Mr. Walls in his testimony, Penn Water had prior claim on the market, with the right to have its own plant loaded and its capacity service recognized, before Safe Harbor was entitled to derive revenue from the same market sources.

If the two hydro plants were to be considered as separate identities, each should want to operate its own pondage to its own advantage, and these interests could not be expected to harmonize.

It would not be good operating practice to segregate the loads which the two hydro developments would serve, as they necessarily had to serve the same load markets and utilize the same primary transmission system.

It became obvious that if the payments for the outputs of the two plants were to be made in accordance with past practice on the basis of separate unit rates for capacity and energy, all of the disadvantages of the existing two-

party contractual arrangement between Penn Water and Baltimore would be greatly aggravated.

Not only would the problem of segregation and classification of capacity and energy services be difficult, if not impossible, on the basis of metered quantities, but arbitrary [192] assumptions in that respect would not always conform either with facts or the equities of the situation.

But the greatest harm in such a course would be caused by the artificial barriers that would be created to the proper dispatching of the available water power at the two plants and the coordination of their operation with the steam plants of the customers that ultimately receive the outputs of the plants.

Q. Has the change in contract form accomplished by the 1931 amendment removed these artificial barriers to coordinated operation? A. Yes. Almost 15 years of experience have now been had with the contractual arrangements that were developed and initiated in 1931.

All of the objectives desired in 1931 have been attained. The Safe Harbor project was successfully constructed, financed and brought to a proper earning level. The most effective utilization of the system steam capacity and energy and that of our hydro plants has been fully achieved, with the resulting conservation of fuel, particularly during the critical days of fuel shortage in the recent national emergency, of benefit to the public.

The ability to supply the Pennsylvania Railroad Company at several widely separated points, to the convenience and advantage of the customer, would not have been possible [193] had it been sought separately by Penn Water or by Baltimore Company, operating under a contractual arrangement that was complicated with artificial barriers.

And finally, Baltimore Company has the assurance for a long period, extending to 1980, of the advantages and certainty of a large source of hydro service which is closely coordinated with its own steam resources, and offering the opportunity to achieve the maximum economy of system operation.

Q. Could the benefits of coordinated operation to the interconnected system be accomplished through any other contractual arrangement than that resulting from the two contracts negotiated in 1931, identified in this record as Items E, F and G and Items H and I, respectively? A. It might be possible to negotiate with Safe Harbor's and Penn Water's existing customers, power contracts that would accomplish this end, but such contracts would have to be predicated on; first, that the Holtwood hydroelectric development and the Safe Harbor hydroelectric development, together with the transmission system of Penn Water be completely under one ownership to eliminate possible adverse interest in earnings; and, second, that such contracts would provide for the proper incentive to the several customers of the hydro companies to assure the accomplishment of maximum overall economies, to provide for an equitable division with its customers of the savings resulting from such operations, [194] and would not introduce any artificial barriers to hinder the most economical method of operation.

[195] Q. Are the present services rendered by Penn Water and Safe Harbor to Baltimore Company independent of one another? A. No, they are not.

Q. Will you please explain in what respect they are joint services? A. The agreements between Penn Water and Safe Harbor and Baltimore Company, identified as Item E, f [F] and G and H and I are premised on the recognition that the services derived from hydro generation and rendered to Baltimore Company by the two hydro companies are physically inseparable.

Baltimore Company is entitled to its share of the Safe Harbor output, and to all of the power and energy of Penn Water from its own plants, and from [Penn] Water's share of the Safe Harbor output which is not used by other customers of Penn Water. A kilowatt hour of energy and a kilowatt of available capacity of Safe Harbor

has the same potentialities as a kilowatt hour and kilowatt from the Holtwood plants.

The Safe Harbor and Holtwood plants are operated as a unit with respect to their use of the available water, and the important aspect of this joint service by the hydro companies lies in the utilization made of the total hydro capacity and energy on the system load.

I have shown by reference to the load charts in Exhibit 8 that in periods when the river flow is less than full draft, the available hydro energy is operated in the peak portion of [196] the load requirements for the purpose of reducing the steam generating capacity that has to be operated by its customers.

A point to be noted is that no distinction is made in this regard between the hydro energy generated at Holtwood and that at Safe Harbor. Both contribute jointly to the capacity savings of steam generation and to the fuel replacement benefit, as well. The values that would attach on a competitive basis as to the outputs of the two plants would be different if this were not so, because a greater value would be assigned to the energy allocated to or operated in the top of the system load requirements.

The joint nature of the services of the two hydro companies is seen also in the co-mingling of the outputs of their plants in the dispatching of economy flow hydro energy in interchange transactions with adjacent utility systems. In fact, all of such business is transacted by Penn Water regardless of whether the energy concerned is derived from the Holtwood or Safe Harbor plants. This is immaterial under the existing contractual arrangements, since Baltimore Company is entitled to receive the benefits of reductions in the expenses of both Penn Water and Safe Harbor that are made possible by disposing of hydro energy where it can be absorbed most economically.

Another phase of the joint services of Penn Water and Safe Harbor is found in the utilization which both make of the transmission system of Penn Water. Penn

Water developed [197] its transmission lines and those of its wholly owned subsidiary, the Steo [STCo.] of Maryland, for the purpose of rendering services to and delivering and interchanging energy to and with its customers in Pennsylvania, Baltimore and in Washington.

When the Safe Harbor project was brought into operation, it was necessary to increase the transmission capacity to Baltimore, and, at the same time, this new plant was electrically connected to the plants at Holtwood. Both plants deliver their outputs jointly in the Penn Water transmission network. Energy from both Penn Water and Safe Harbor is free to flow to all customers of Penn Water, and this is as it should be.

Q. Do the contractual relations with Baltimore Company recognize the joint nature of these services? A. Yes. The contractual arrangements with the Baltimore Company [sic] were purposely designed in 1931 to permit the joint services of Penn Water and Safe Harbor to be utilized in a natural physical manner with a minimum of inter-company accounting and nonproductive effort that would only impede the economical operation of the power system. This could not be done were artificial barriers in effect, or the true natures of the joint services of Penn Water and Safe Harbor not fully understood.

[198] Q. Mr. Spaulding, have you prepared a tabulation showing the payments by Penn Water to Safe Harbor for the years 1944 and 1945 for actual conditions and as estimated for the year 1946? A. Yes, I have.

MR. MYSE: I ask to have identified as Exhibit 16 the document entitled "Payments made by Penn Water and Baltimore Company to Safe Harbor Water Power Corporation".

TRIAL EXAMINER: The tabulation will be marked Exhibit 16 for Identification.

[199] (The document above referred to was marked Exhibit No. 16 for Identification.)

By MR. MYSE:

Q. Mr. Spaulding, will you please state what Exhibit 16 for Identification shows? A. This exhibit shows the actual payments by Penn Water to Safe Harbor for the years 1944 and 1945, and the estimated payments for the year 1946. It also shows the actual payments by Baltimore Company to Safe Harbor for the years 1944 and 1945 and is estimated for the year 1946.

MR. MYSE: I ask to have identified as Exhibit 17 a document dated January 8, 1945 and entitled: "Safe Harbor Company's bill to Baltimore Company and Holtwood Company for the year 1944", and attached thereto are similar bills for the year 1945 and as estimated for the year 1946.

TRIAL EXAMINER: The document referred to will be marked Exhibit 17 for Identification.

(The document above referred to was marked Exhibit No. 17 for Identification.)

MR. MYSE: I also ask to have identified as Exhibit 18 the document entitled "Holtwood Company's bill to Baltimore Company for December, 1944", and attached thereto like bills for December 1945 and as estimated for the year 1946.

TRIAL EXAMINER: The document will be marked Exhibit 18 for Identification.

[200] (The document above referred to was marked Exhibit No. 18 for Identification.)

By MR. MYSE:

Q. Mr. Spaulding, will you please identify and state what is shown on Exhibits 17 and 18 for Identification? A. Exhibit 17 are Safe Harbor's actual bills to Penn Water and Baltimore Company as prepared and agreed upon by

the Operating Committee for the companies for the years 1944 and 1945, dated January 8, 1945, and January 8, 1946, respectively, together with Safe Harbor's estimated bill to Penn Water and Baltimore Company for the year 1946, dated April 11, 1946.

[201] Although these bills are headed "Bills for December, 1945 and December, 1944", they are the final adjusted bills as computed by the Operating Committee at the close of the year.

Q. Will you state what is shown on Exhibit 18 for Identification? A. Exhibit 18 for Identification is Penn Water's actual bills to Baltimore Company as prepared and agreed upon by their Operating Committee for 1944, 1945, dated January 8, 1945 and January 8, 1946, respectively, together with Penn Water's estimated bill to Baltimore Company for the year 1946, dated April 11, 1946.

Q. Likewise, the bills shown on Exhibit 18 state that it is for December, 1944. Will you explain the meaning of that designation? A. The bills between Safe Harbor on the one hand, and Penn Water and Baltimore on the other, as well as the bills rendered by Penn Water to Baltimore Company are redetermined quarterly, until the last quarter, when a final adjustment is made at the end of November and at the end of the year respectively. These bills are the final bills prepared after the close of the year, but are further subject to adjustment later in the year, if final adjustments are found necessary.

Q. Do you know whether or not there were any adjustments to the bills for the year 1944? [202] A. There were no adjustments after the close of the year 1944 and 1945, for either companies.

Q. Mr. Spaulding, you stated previously, in your testimony with respect to your Pennsylvania customers, that these customers are billed separately for firm power services and for interchange transactions, did you not? A. Yes, I did.

Q. Do you show on such interchange bills to Pennsylvania customers the sales to and purchases from each

customer as separate items? A. Yes; they are shown as separate items.

Q. Referring to Exhibit 18 for Identification, will you indicate how these several separate items are shown thereon for at least one of your Pennsylvania customers? A. Referring to Penn Water's bill to Baltimore for the year 1944, being a part of Exhibit 18, Item (e) 1, shows the revenues received by Penn Water from Pennsylvania Power & Light Company for firm power services as \$2,166,823.11. The amount received as revenue from that company for interchange which it purchased from Penn Water is shown in Item (e) 7, as \$290,314.56, while the amount paid to the Pennsylvania Power & Light Company by Penn Water for interchange purchased is shown in Item (d) 3 as \$50,179.73.

Q. Does this same annual bill of Penn Water to Baltimore Company for the year 1944 show similar segregated items [203] with respect to Baltimore Company for firm power services and for interchange services? A. No; it does not.

Q. Will you please explain? A. Referring to the annual bills for 1944 and 1945 included as parts of Exhibit 18 for Identification, it will be noted on each bill that Item (i) on the annual bills for 1944 and 1945 is termed "net bill". All firm power services and interchange services have been netted in this one item. As explained previously, the payments made by Baltimore Company to Penn Water on the basis of this bill are independent of the amount of firm power services or the amounts of interchange.

It is unnecessary, therefore, in the preparation of the annual bill to state the actual amount of energy delivered to, or the amount of backfeed energy received from, Baltimore Company.

Q. Is it possible for you to restate Penn Water's bill to Baltimore Company so that it would show the payment by Baltimore Company to Penn Water for firm power services, exclusive of interchange transactions? A. Yes; it is. The operating records of the company permit the de-

termination of the amount of interchange services to Baltimore Company and the amount of backfeed purchased from Baltimore Company and the amount of energy diverted from [204] Baltimore Company to which the latter is entitled.

Q. Have you made such a determination? A. Yes; I have.

Q. Mr. Spaulding, I will ask you to state what Exhibit 19 for Identification shows. A. This Exhibit is a restatement of Penn Water's annual bills to Baltimore Company, identified as Exhibit 18. This restatement segregates the effect of interchange transactions between Penn Water and Baltimore Company and shows the gross amount of the charges for firm power services, for the years 1944 and 1945, and as currently estimated for the year 1946.

[205] This Item (d) 5 is made up of two components of energy purchased from Baltimore Company and used in connection with sales by Penn Water in Pennsylvania.

The first, shown as Item (d) 5a, is the backfeed used in connection with sales by Penn Water to its firm power customers in Pennsylvania, and, second, Item (d) 5b, is the sum of the backfeed energy and of diverted energy used in connection with sales as interchange by Penn Water in Pennsylvania.

It should be noted in connection with this latter Item (d) 5b, that the revenues received for such interchange sales, together with the revenues received on sales of Safe Harbor's and Penn Water's excess hydro and Penn Water's own economy [206] steam, are the same revenues shown by the sum of Items (e) 5, 6 and 7 taken together.

Q. Will you please explain what you mean by the term "diverted energy used in connection with sales as interchange"? A. Energy and capacity provided by Penn Water and Safe Harbor, to which Baltimore Company is entitled and which it could utilize, are at times diverted and

sold to others as interchange energy and capacity, with Baltimore Company's cooperation.

This diversion of energy and capacity, so necessary to the coordinated operation of the interconnected system, is made when it is more economical for the Baltimore or Washington Company to increase its own steam generation, thereby permitting Penn Water to sell its own energy or capacity as interchange to its Pennsylvania customers at a price greater than the cost of such generation in Baltimore or Washington.

Q. Referring now to Item (e) on the adjusted bill to Baltimore Company for 1944, Exhibit 19, please explain Item (e) 11. A. Item (e) 11 "Baltimore Company Interchange" is Penn Water's compensation from Baltimore Company for interchange purchased by Penn Water from its Pennsylvania customers and used in connection with the services by Penn Water to Baltimore Company. Such transactions take place when it is [207] more economical for the Baltimore and Washington Companies to decrease their own generation and increase their receipts of energy from Penn Water, with a resultant saving in Baltimore Company's operating expenses.

The amount shown in (e) 11 compensates Penn Water for the latter's expense incurred in purchasing interchange from its Pennsylvania customers to replace generation in Baltimore and Washington.

[208] Q. What is the relation between the interchange purchases for the Pennsylvania customers shown in Item (d) 1, 2, 3, of the interchange services to Baltimore Company as shown in Item (e) 11? A. Penn Water's purchase of interchange from its Pennsylvania customers are greater than the amount of such interchange services to Baltimore Company, as Penn Water frequently purchased a considerable amount of energy in Pennsylvania for use of supply of its firm power customer's requirements in Pennsylvania, when it is economical to do so to the end of the maximum system coordination.

These purchases from the Pennsylvania customers for firm supply in Pennsylvania are similar in nature to the backfeed purchased from Baltimore for use in connection with Penn Water's firm supply in Pennsylvania, which is shown in Item (d) 5a. Under several of its contracts Penn Water may obtain such energy from the most economical source of supply.

Q. Can you indicate from Exhibit 19 what would be Penn Water's revenues from and payment to Baltimore Company with respect to interchange transactions between them? A. Yes, I can. Item (d) 5 would be Penn Water's payments to Baltimore Company for interchange purchases by Penn Water from Baltimore Company and Item (e) 11 would be Penn Water's revenue from Baltimore Company for interchange services rendered by Penn Water to Baltimore Company.

[209] It should also be stated that through these transactions all of Penn Water's share of the savings on its interchange with Pennsylvania customers is credited to the Baltimore Company.

[221] **GEORGE WHITTIER SPAULDING,**

CROSS-EXAMINATION.

By Mr. GOLDBERG:

[235] Q. My question is: Does Safe Harbor sell interchange energy under the contracts identified as H and I?

Mr. MYSE: Just a moment. I would like to interject and point out that Items H and I are contracts to which Safe Harbor is not even a party.

Mr. GOLDBERG: I am perfectly aware of that.

[235] Q. Does Safe Harbor sell interchange energy at all? First, let me ask you that. Without reference to any con-

tract, does it sell interchange energy? A. Yes, jointly with Penn Water.

Q. Does it sell that interchange energy which you say it sells jointly with Penn Water, under the contracts identified as Items H, and I, or under the contracts identified as Items E, F and G, or both? A. You have to take them together.

Q. The sales of interchange energy does not take place under one group or the other, but takes place under both? A. Correct. But the accounting for it is in accord with the accounting and billing carried out in connection with the contracts submitted and identified as Items H and I.

Q. Is it not a fact, Mr. Spaulding, that under the contracts identified as E, F and G, which is the contract between Safe Harbor, Consolidated of Baltimore, and Penn Water, that Safe Harbor under that contract sells all of its capacity and energy to Consolidated and Penn Water?

MR. SPARKS: That is subject to the same objection that was made a while ago that that involves a consideration of the contract by Mr. Spaulding.

TRIAL EXAMINER: If the Witness can answer that question, [236] on the basis of what the practice and understanding of the Company is, then that is another matter.

THE WITNESS: Yes.

TRIAL EXAMINER: The Witness is not being asked to construe a contract.

THE WITNESS: Yes. All of Safe Harbor's capacity and energy are under the contracts offered as Items E, F and G and the entitlements of Baltimore and Penn Water.

Q. And those entitlements take care of all of Safe Harbor's capacity and energy, isn't that so? A. It takes care of the entitlements, but not what happens to it.

By MR. GOLDBERG:

Q. You mean by that, that although the contract provisions are to the effect that two-thirds of the capacity and energy is provided for as going to Baltimore and one-third to Holtwood, that as a matter of fact all of the capacity and energy may go to Baltimore at given times? Or it may all go to Penn Water's customers in Pennsylvania at given times.

Q. But the fact of the matter is that wherever it may go,—Baltimore, Washington or Pennsylvania—the contracts identified as E, F and G provides for the sale of all of Safe Harbor's energy and capacity, isn't that so? A. That is correct.

[237] Q. Now, can you tell me why if Safe Harbor is a participating party in the contracts identified as Items H and I, it is not a party to that contract? A. It is not necessary to be. The contracts identified as H and I, and the contracts identified as Items E, F and G have to be taken together in considering the services to the Baltimore Company.

Q. Well, now, let us refer to Items E, F and G, and taking your premise that Items E, F and G and H and I must be taken together, and that is why it is not necessary to include Safe Harbor in the contracts as identified as H and I, why were all three parties included in Items E, F and G? It was not any more necessary there, was it, according to you. A. May I answer your first question?

Q. Yes, go ahead. A. Because Penn Water and Baltimore Company jointly owned Safe Harbor and wished to be assured of the total capacity and energy of Safe Harbor in connection with its respective uses and sales.

Q. Isn't it a fact that Consolidated of Baltimore and Pennsylvania Water and Power are parties to the agreement identified as Items E, F and G because sales of capacity and energy are being made to them under that contract by Safe Harbor? A. Only the entitlements.

[238] Q. Well, we have been over that. Isn't that so? Let us go back to my question before Mr. Spaulding interposed as to the entitlements.

THE WITNESS: The answer is, yes.

By MR. GOLDBERG:

Q. I think you testified that Safe Harbor was a party to the original agreement between Pennsylvania Water and Power Company and Metropolitan Edison Company, is that correct? A. That is correct.

Q. And recently, you testified, that that agreement was cancelled, and a new one consummated, is that correct? A. Correct.

Q. And in the new contract, Safe Harbor is not a party; is that right? A. That is right.

[239] Q. Only Pennsylvania Water and Power Company and Metropolitan Edison Company? A. That is right.

Q. Why was Safe Harbor omitted? A. The original reason for Safe Harbor being made a party to the Edison Light and Power contract of York was to provide that the capacity and energy of Safe Harbor to which the Holtwood Company was entitled on the one hand, and received and used on the other hand, would be available in that contract to York.

There were also two other reasons for Safe Harbor being made a party. One was a legal reason having to do with the right of Safe Harbor to sell and distribute energy at wholesale in York County; and the second was to protect against double taxation on the sales made to Edison Light and Power.

When the new contract was made between Penn Water and Metropolitan Edison Company effective January 1, 1946 to supersede the old contract, it was the opinion of counsel that it was no longer necessary to make Safe Harbor a party to protect its position in the first two instances, and the third reason no longer appeared to exist.

Q. And for the same reasons you have outlined for the inclusion of Safe Harbor in the original Metropolitan Edison contract now superseded Safe Harbor was included as a party in the agreements whereby service is [240] provided to the Philadelphia Electric and Pennsylvania Power and Light Company? A. The same reasons existed at the times those early contracts were made.

. . .

[242] Q. Without asking you to give any legal opinion, but based entirely on the reasons you have outlined why they were included in the first instance, and not included in the second instance, is it reasonable to conclude that since Safe Harbor was included in the present contract between Pennsylvania Water and Philadelphia Electric and Pennsylvania Power and Light Company, for the same reasons then Safe Harbor could be excluded from those contracts?

. . .

THE WITNESS: From a practical point of view of operation and irrespective of the terms of the contracts or the legal interpretations, thereupon, it could be.

. . .

[251] Q. Do you recall, Mr. Spaulding, that in your testimony yesterday you spoke about capacity available from drawdown of the pond? A. I do.

Q. At that time were you referring to the Safe Harbor pond, or to the Holtwood pond, or both? A. I think I stated in the record that both ponds were usable as draw-down, although the major amount of the storage water is behind the Safe Harbor Dam.

Q. Is the capacity available from draw-down of the pond as valuable as the dependable capacity of the stream? A. It is.

Q. To the purchaser? A. Yes, to the purchaser.

Q. With respect to this new contract just between Penn [252] Water and Metropolitan Edison, does the Safe Har-

ber render any service under this contract? A. Not directly.

Q. Will you please explain your answer—"not directly"? A. The contract is drawn between Metropolitan Edison Company and Penn Water.

Penn Water assumes all the obligations thereunder.

However, Penn Water makes the fullest use of its own resources and those of Safe Harbor in so doing.

Q. And this was true even before the new contract was entered into? A. That is correct.

Q. But under the new contract Safe Harbor is not a party? A. That is right.

Q. Of the revenue Penn Water receives under the new contract, with the Metropolitan Edison does Safe Harbor receive any portion of those revenues from Penn Water?

A. Not directly.

Q. When you say "not directly" what do you mean?

A. All of the payments made by Metropolitan Edison under that contract with Penn Water goes directly to Penn Water.

Those revenues are available, in part, for the payments on which Penn Water is obligated to Safe Harbor for the [253] services obtained from Safe Harbor by Penn Water.

Q. That is what you meant when you said "not directly"? A. That is correct.

Q. In other words, by reason of Penn Water's arrangement with Metropolitan Edison whereby it receives for sale of power and energy to Metropolitan Edison revenues, it has income available to it to enable it to meet its obligations in part or in whole to Safe Harbor for the energy it receives from Safe Harbor under the agreement identified in this proceeding as Items E, F and G for the energy, capacity, and the services? A. Yes.

[258] THE WITNESS: Safe Harbor receives no revenues from the Metropolitan Edison Company.

By MR. GOLDBERG:

Q. Directly or indirectly? A. Directly or indirectly.

Q. Prior to the consummation of the new agreement between Penn Water and Metropolitan Edison, did Safe Harbor receive any revenues directly or indirectly from Metropolitan Edison? A. You mean Edison Light and Power Company, do you not?

Q. All right. I will accept that amendment. There is some relationship there that enables you to refer to it as Edison Light and Power, as I understand it? A. Edison Light and Power made payments to Metropolitan Edison and Penn Water.

Q. All right, let us talk in terms of Edison Light and Power when we talk about the old contract? A. All revenues for services under the prior contracts by Edison Light and Power were made directly to Penn Water.

MR. GOLDBERG: I won't move to strike that answer because it is not responsive, Mr. Examiner, but I think I am entitled to a direct answer to the question. May I have the question read?

TRIAL EXAMINER: Read the question.^a

[259] THE WITNESS: No; Safe Harbor did not receive any revenues from Edison Light and Power Company directly, but it received revenues [sic] indirectly through Penn Water.

By MR. GOLDBERG:

Q. How did it receive revenues indirectly through Penn Water? A. Penn Water used Safe Harbor's services to which it was entitled, together with its own resources in supplying this power and other services to Edison Light and Power of York.

Q. And Penn Water used the revenues it received from Edison Light and Power to pay Safe Harbor for the serv-

ices of Safe Harbor that Penn Water used to serve Edison Light and Power? A. I think that is correct.

Q. Were the revenues received from the Edison Light and Power Company contracts segregated so that you were able [260] to trace those revenues to Safe Harbor? A. No.

Q. You reached the conclusion that Safe Harbor received revenues indirectly from Penn Water as a result of Penn Water's services to Edison this way,—now, let me state it and you tell me whether I am right or wrong:

Penn Water received income from its contract with Edison Light and Power as well as income from its contracts with other customers and it used that income received from Edison Light and Power and its other customers to meet its obligations to Safe Harbor under Items E, F and G in this proceeding, is that right? A. That is correct. May I qualify that answer?

Q. Yes. A. The distinctions that I do not find in your question, which I have tried to explain, is that both Penn Water and Safe Harbor obligated themselves for services under the contract with Edison, and it thereby was a joint service, although the revenues were actually paid by Edison to Penn Water.

. . .

[261] Q. You have told us that under the old agreement between Penn Water and Edison Light and Power, Safe Harbor received revenues indirectly from Penn Water. Is it your testimony that under the agreements between Safe Harbor, Penn Water and Philadelphia Electric and Safe Harbor, Penn Water and Pennsylvania Power and Light Company, Safe Harbor also receives revenues from Penn Water indirectly?

MR. SPARKS: Excuse me, you did not mean Penn Water [262] indirectly, did you, Mr. Goldberg?

MR. GOLDBERG: Yes, I did.

THE WITNESS: Will you please read the last part of that question?

(The preceding question is read.)

MR. GOLDBERG: In both instances it should be through Penn Water indirectly. Mr. Sparks is right.

THE WITNESS: From whom? From the customer?

By MR. GOLDBERG:

Q. From the customer companies? A. Yes. In both of these instances, the P. P. and L. contract with Penn Water and Safe Harbor, and the contracts between Penn Water, Safe Harbor and the Philadelphia Electric Company for services at Coatesville, Penn Water and Safe Harbor undertook to provide firm power services jointly, but in each instance the revenues were all received from the purchasing company by Penn Water, who, in turn, reimbursed Safe Harbor for the use of the facilities and services rendered by Safe Harbor with Penn Water.

. . .

Q. Do you say that, even though it is a fact, that all [263] of the services rendered by Safe Harbor to Penn Water and Baltimore Company are rendered under the agreements identified as Items E, F and G in this proceeding, is that right? A. May I have that question read?

TRIAL EXAMINER: Yes, read the question.

(The preceding question was read.)

THE WITNESS: No, all the services rendered by Safe Harbor are not rendered under the contracts offered as Items E, F and G.

. . .

Q. And the two customer companies may use those services in any way they see fit to meet the requirements on their own systems, isn't that so?

. . .

Q. By "they see fit", I mean in accordance with the [264] requirements on their system; in other words, there are no strings attached by Safe Harbor to their use of the

services sold under Items E, F and G to Consolidated and Penn Water.

[265] THE WITNESS: Safe Harbor entered into other contracts other than those offered as E, F and G for the supply of services, with the knowledge and consent of Baltimore and Penn Water, which is required under the terms of the three-party contract offered and identified as E, F and G.

[269] Q. You told us, now, that under the agreements that Penn Water has with Pennsylvania Power and Light Company and Philadelphia Electric Company, Safe Harbor receives revenues indirectly through Penn Water; right? A. I did.

Q. I show you Exhibit 18 in this proceeding? A. Yes.

(Witness examines Exhibit 18.)

By MR. GOLDBERG:

Q. Does it not appear from Item (e) of this power bill that the revenues received by Holtwood from this agreement, rather than going to Safe Harbor, are credited to the Baltimore Company? [270] A. No, it does not.

[276] Q. Relating ourselves to the contracts which produce the revenues shown as (e) 1 to (e) 3, and let us say which are shown on Exhibit 18, it is a fact, is it not, that the power bill marked as Exhibit No. 18 shows revenues received by the Holtwood Company from its customer companies; from those customer companies, that is? A. Yes, under contracts to which Safe Harbor was a party.

Q. And under those contracts, you stated Safe Harbor indirectly received revenues through Penn Water; right? A. That is correct.

Q. And the revenues received under those contracts are shown in (e) 1, (e) 2 and (e) 3 of Exhibit No. 18, page 1, right? A. They are.

Q. They are a part of the make-up of the total figure of \$5,930,957.24, right? [277] A. Sure, they are.

Q. Each figure contributes—or at least this figure contributes to the Baltimore net bill—— A. (Interposing) I do not hear you.

Q. Which figure, of which I have spoken, contributes to the ultimate net bill of \$2,027,848.76 to the Baltimore Company; right?

THE WITNESS: It does not contribute to it, it is used here in this Exhibit as a means of arriving at a contract figure.

By MR. GOLDBERG:

Q. In Exhibit 18, in arriving at the amount Baltimore Company owes Holtwood, all of the revenues received from the contracts we have just discussed were credited to Baltimore Company, right? A. No.

Q. No? A. No, they were not credited to the Baltimore Company,—as I understand your question—but they were merely used as an amount to determine the revenues that the Baltimore Company owed Penn Water.

[278] Q. As a result of which computations the amount of money owed by Baltimore Company to Holtwood was correspondingly reduced; right?

THE WITNESS: May I have the question read?

TRIAL EXAMINER: Read the question.

(The preceding question was read.).

THE WITNESS: No. That is not correct.

By MR. GOLDBERG:

Q. Did not the Baltimore Company receive the benefit of all of those revenues? A. They did not.

Q. If you eliminate (e) 1 on Exhibit 18, what would the situation be? A. If you eliminate (e) 1 from Exhibit 18, and you eliminate the services rendered thereunder, then Baltimore Company would have paid more money and got greater services.

Q. Suppose we reduce the amount of revenue received from Pennsylvania Power and Light Company for firm power to \$1,000,000, in round figures, instead of \$2,166,823.11, shown on Exhibit 18, what would the power bill have been, Mr. Spaulding? A. I will have to have more information, because I could not answer the question otherwise.

Q. There is no change in the services. A. That bill to the Baltimore Company would have [279] increased.

Q. And solely, as a result of the difference in the amount of revenues received from Pennsylvania Power and Light Company, right? A. That is correct.

[281] DONALD GUNN,
a witness on behalf of the Respondent, being first duly sworn, testified as follows:

DIRECT EXAMINATION.

By MR. HULL:

Q. Your name is Donald Gunn? A. It is.

Q. What is your present position with the Respondent company and your occupation? A. I am an engineer, and I am Chief Engineer of Pennsylvania Water & Power Company and Assistant Advisory Engineer of the Safe Harbor Water Power Corporation. I am also a Director of Susquehanna Transmission Company of Maryland.

Q. How much experience have you had in the electric light and power industry? A. Approximately twenty years, altogether, principally with the Duquesne Light Company of Pittsburgh, the Georgia Power Company, and the Holtwood and Safe Harbor companies.

[282] Of these companies, the Georgia Power Company and the Holtwood and Safe Harbor companies operate extensive hydroelectric plants.

I graduated from the Darlington Military Academy in 1919, after completing the scientific course, and from the

Georgia School of Technology in 1925, receiving the degree of Bachelor of Science in Electrical Engineering.

In 1926, while taking a course of apprentice engineering training offered by the Duquesne Light Company of Pittsburgh, I did post-graduate work on high-voltage transformers at the Carnegie Institute of Technology.

Prior to graduation from the Georgia School of Technology, I had about two-and-a-half years' experience successively as an electrician for the Walker Electric Company on cotton mill electrification, as apprentice lineman for Georgia Power Company on 4,000-volt line construction and repair, as station operator for Georgia Power Company, and as draftsman for the same company.

During that period, I was also employed for about seven months by the Glover Machine Works on the design of industrial locomotives and locomotive cranes.

After graduation from the Georgia School of Technology, I took a course of apprentice engineer's training offered by the Duquesne Light Company of Pittsburgh. This course of training was for one year and included proportionate [283] experience in each functional department of that company's business. The Duquesne Light Company serves electricity and commercial heat in the City of Pittsburgh and the surrounding industrial area.

Upon completion of the apprentice engineer's training course, and for a period of about one year, I was employed as junior engineer in the system's development department. I prepared economic and special engineering studies of the Duquesne Light Company system; made studies to determine system additions; made analytical studies of operation; and assisted in development testing on power system equipment.

On April 1, 1927, I became field supervisor in the system operating department of Duquesne Light Company. My responsibilities in this position included studies to determine the proper operating voltage schedule for electric generating stations, supervision over and placing in serv-

ice of all additions to the company's system, supervision over general changes in system voltage, together with special investigation of power interchange capacity between interconnected operating companies in Western Pennsylvania and Ohio.

From April 23, 1928, until February 1, 1929, I was connected with the American Rolling Mill Company. During this period I became familiar with all phases of steel manufacture, particularly in promotion of the use of that [284] company's products by electric utility companies.

On February 1, 1929, I accepted a position with the Pittsburgh branch of the Byllesby Engineering and Management Corporation as Assistant to the General Superintendent of Construction. During the course of about one-and-a-half years' employment by this company, my duties were of a general nature on a construction program which employed in excess of 5,000 men.

Special investigation undertaken by the construction department of this company during that period was under my supervision.

From October 1930 until August 1942, I was employed by Penn Water and Safe Harbor Company, and my duties were those of Assistant to the Chief Engineer.

I should like to say here that throughout my testimony in referring to Pennsylvania Water and Power Company and its wholly owned subsidiary, Susquehanna Transmission Company of Maryland jointly, I will refer to the combination as Penn Water. When referring to those companies separately, I will use their full corporate names.

I was employed by these companies for work on the Safe Harbor project shortly after the Safe Harbor Company undertook development of that project. In addition to my general duties in connection with the development of the Safe Harbor project, I was delegated responsibility for estimating and [285] cost studies and the preparation of labor wage schedules for both Penn Water and Safe Harbor.

After the first four units were installed at Safe Harbor, I undertook a detailed study of depreciation of important medium and low-head hydroelectric developments of early origin in the eastern part of the United States and Canada.

This study covered developments representing more than 2,000,000 installed horsepower and included detailed physical examinations, specific determination of physical property history, a study of the history of the development of the various elements of property, past maintenance experience, operating conditions and other factors necessary to a determination of actual depreciation.

Q. You spoke of 2,000,000 installed capacity. Do you mean 2,000,000 horsepower or 2,000,000 kilowatts? A. 2,000,000 installed horsepower capacity.

Q. Will you proceed. A. My duties have been such that I have been intimately familiar with the design and construction features of Penn Water's and Safe Harbor's property and its operation and maintenance during the past 15 years.

Since my employment with these companies, I have been familiar with material and supplies purchases of the companies for both operation and construction. In my present [286] position, I am responsible for major maintenance and construction projects for both Penn Water and Safe Harbor Water Power Corporation.

Since my employment by these companies, I have been responsible for the classification of all construction costs as well as the division of costs between construction and operation and maintenance. During the years 1936 to 1940, the preparation of original cost studies of Penn Water, pursuant to orders of the Federal Power Commission was made under my supervision.

In 1942 I became Chief Engineer of Pennsylvania Water and Power Company; Assistant Advisory Engineer of Safe Harbor Water Power Corporation; and Director of Susquehanna Transmission Company of Maryland.

In 1939 and again in 1944, I made studies of actual existing depreciation in the property of Safe Harbor Water Power Corporation and testified to the results of those studies in two rate proceedings before the Federal Power Commission, which proceedings are designated IT-5494 and IT-5914.

I am a professional engineer, registered in the States of Maryland and Pennsylvania, and I am a member of the American Institute of Electrical Engineers and the American Society of Civil Engineers.

I am also a member of the Special Depreciation Committee [287] of the Pennsylvania Electric Association, and have been an alternate member of the American Society of Civil Engineers' Subcommittee on Depreciation.

* * *

[402]

DONALD GUNN,

DIRECT EXAMINATION (Resumed).

By MR. SPARKS:

Q. Your name is Donald Gunn? A. Yes.

Q. And you have previously testified as to your qualifications and experiences? A. I have.

Q. Has there been prepared under your supervision a consolidated statement showing Original Cost of Electric Plant of the Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland as of December 31, 1945? A. There has been.

* * *

Q. Mr. Gunn, I hand you a copy of a document which has [403] been marked for identification as Exhibit No. 25 and ask you if this document, consisting of three sheets, is a copy of the statement to which you have referred? A. It is.

Q. Will you describe this exhibit and state how it was prepared? A. Pursuant to Instruction 2-D, Electric Plant Accounts of the Uniform System of Accounts Pre-

scribed for Public Utilities and Licensees by the Federal Power Commission, which became effective January 1, 1937, and an order of that Commission adopted May 11, 1937, Pennsylvania Water & Power Company and its wholly owned subsidiaries, Susquehanna Transmission Company of Maryland, Susquehanna Transmission Company of Pennsylvania and Pennsylvania Transmission Company proceeded to make original cost studies covering the period from the formation of the Companies to December 31, 1936.

These were filed with this Commission on May 15, 1940.

. . .

[404] TRIAL EXAMINER: The various documents described by counsel which bear the designations Items K to N, inclusive, are received in evidence by incorporation and reference to the official files of the Commission.

. . .

[406] Q. You may proceed. A. It should be noted that in December, 1939, the Susquehanna Transmission Company of Pennsylvania, and the Pennsylvania Transmission Company were merged with the Pennsylvania Water & Power Company.

Consequently, the original cost studies of these three companies have been combined into one, and are shown as one figure designated as "Pennsylvania Water & Power Company," on the statement marked for identification as Exhibit 25.

The Susquehanna Transmission Company of Maryland is shown separately.

One of the first steps in the original cost determination was the taking of an inventory of all plant and equipment in service on December 31, 1936.

Concurrently with the taking of the inventory, analyses were made of all of the cost records of the Pennsylvania Water & Power Company, McCall Ferry Power Company—including Susquehanna Contracting Company—the committee acting for the bondholders of McCall Ferry Power

Company, and the receiver for McCall Ferry Power Company.

Similar inventories and cost studies were made for the three subsidiary transmission companies. Then followed the process of matching the inventories against the cost analyses.

Responsibility for the original cost study of Pennsylvania [407] Water & Power Company and all of its subsidiary companies was assigned to me. I received my general instructions from Mr. Walls, President of Pennsylvania Water & Power Company. On accounting matters, my instruction and guidance came from Mr. J. E. O'Connor, who was vice-president and secretary of that company.

Mr. W. H. Eichhorn, Jr., who is secretary and assistant treasurer of Pennsylvania Water & Power Company, assisted me with the accounting problems involved in the study.

Mr. R. L. Bortner, who is right-of-way engineer and assistant secretary of Pennsylvania Water & Power Company, assisted me on matters relating to real property.

Mr. R. W. Chase, who is civil engineer assigned to special studies, assisted in the determination of the date of the beginning of commercial operation and on other problems involving engineering and technical decisions.

Mr. D. L. Wetzel, who is budget engineer, was responsible for inventorying the property, compiling analyses of costs, reconciling the cost analyses with the inventory, and similar matters.

The statement marked for identification as Exhibit 25 shows in column (b) the amount of the original cost as of December 31, 1936.

To the original cost as of December 31, 1936, there has been added the net additions to the property of the company [408] and its wholly owned subsidiary, Susquehanna Transmission Company of Maryland, for the period January 1, 1937 to December 31, 1945.

By adding these two amounts together, we have arrived at the total original cost of Pennsylvania Water & Power Company and Susquehanna Transmission Company of Maryland as of December 31, 1945.

The statement shows combined electric plants in service as of December 31, 1945, amounting to \$36,389,381.93.

In addition to electric plant in service, the following items are included:

Account 103, construction work in progress.

Account 104, electric plant held for future use.

Q. Mr. Gunn, will you read those account numbers again, please? A. I beg your pardon. They should read as follow:

Account 100.3—construction work in progress.

Account 100.4—electric plant held for future use.

Q. Proceed. A. Construction work in progress represents the cost of property additions which are not yet completed, but which, when completed, will be charged to appropriate plant accounts.

Electric plant held for future use represents property which is neither construction work in progress or plant in service, but the need for which in the future can be foreseen. [409] Q. Is the amount, which was recommended in the original cost filing, to be held in Account 107, included in this exhibit? A. No. For the purpose of this proceeding, we are not claiming the amount recommended to be held in Account 107 as part of original cost.

Q. What does the exhibit show to be the total original cost as of December 31, 1945? A. The total original cost, as of December 31, 1945, is \$36,704,706.47.

Q. \$36,704,706.47. Has there been prepared under your supervision the "History of the Holtwood Development to the Beginning of Commercial Operation—October 1, 1911"? A. Yes.

Q. Is this document, containing some 120 pages, the history to which you refer? A. It is.

[410] Q. Mr. Gunn, I hand you a document which has been marked Exhibit No. 26 for identification. I ask you if this is a document containing about 126 pages which is the history to which you refer? A. It is.

Q. Is there accompanying this history supporting documentary proof? A. There is.

[412] Q. Mr. Gunn, I hand you a document consisting of 68 parts, which has been marked for identification as Exhibit 27, and ask you if this is the bound volume to which you have referred? A. Yes.

Q. That is the volume you have made reference to heretofore? A. It is.

MR. SPARKS: If Your Honor please, in order that we may facilitate reference to the exhibit, I want to ask Mr. Gunn this question.

By MR. SPARKS:

Q. Mr. Gunn, are there references in Exhibit 26 to certain exhibit numbers, references which refer to Parts 1 to 68 in Exhibit marked for identification No. 27? A. That is correct.

[413] Q. Mr. Gunn, what was the occasion for the preparation of these historical data? A. In connection with the companies' compliance with the Commission's 1937 system of accounts and in anticipation of the possibility of a proceeding to determine the net investment in the project after a license would be issued by the Commission, we proceeded to gather all of the information that we could concerning the early history of the development.

Exhibit No. 27 for identification contains the significant documentary evidence concerning the early history of the development. These documents were procured from the files of the companies, and from offices of other concerns which were interested in and connected with this development.

Exhibit 25 is a chronological summation of the documents, showing their interrelation in connection with each other.

Copies of these exhibits, No. 26 for Identification and No. 27 for Identification, were furnished to the Commission's Staff during the latter part of 1940.

Q. 1940? A. 1944.

Q. 1944? A. 1944.

Q. These two exhibits here? A. Yes.

[414] TRIAL EXAMINER: Exhibit 25 for Identification is received in evidence.

CROSS-EXAMINATION.

By MR. GOLDBERG:

[417] Q. Mr. Gunn, I direct your attention to Exhibit 27 Part 1, that appears to be the affidavit of a Dr. Franz Hahr Stewart, Mr. Hollis Rinehart, Jr., and Cary T. Hutchinson.

Is Mr. Hutchinson alive today? A. No, he is dead.

Q. When did he die? A. A few days after this affidavit was obtained.

Q. Is Dr. Stewart alive? A. So far as I know. I am not personally acquainted [418] with Dr. Stewart.

Q. How about Mr. Rinehart? A. So far as I know he is also alive.

Q. And as far as you know are both Dr. Stewart and Mr. Rinehart still living in Florida? A. So far as I know, yes.

Q. I notice in the paragraph numbered 1 of Mr. Hutchinson's affidavit that he states that he held numerous conferences in Miami, New York and Baltimore with representatives of Pennsylvania Water & Power Company.

When were those conferences held? A. Those conferences were held over a period of about six or eight months preceding January, 1939.

Q. Were they all in 1938, all of the conferences? A. Yes, they were all in 1938. There may have been one in 1937, but the principal of them were in 1938.

Q. Did you keep any notes on those conferences? A. Well, I would't say—

Q. (Interrupting) I have assumed in my question that you were present. A. I was present.

Q. At all the conferences? A. Yes.

Q. And you don't recall whether you kept notes on the conferences? [419] A. I may have made some notes of some sort. I did not make any particular report on the conferences.

Q. Do you have any material prepared by you that would enable you to refresh your recollection about when those conferences took place and what transpired? A. I think I could refer to my file and find letters written to Dr. Hutchinson making arrangements for the conferences, and I think in other letters I might find references to the discussions I had with Hutchinson. Just how much of the substance of the conferences that I had with Hutchinson would be revealed by that, I don't know.

Q. Were you the only representative of the Pennsylvania Water & Power Company present at those conferences with Mr. Hutchinson? A. I was the only one that was present at all of them, but at various times various other people were present.

Q. Who were the others? A. Mr. Chase, I believe, and Mr. Eichhorn. I believe at one of the conferences Mr. Higgins was present.

Q. Was Mr. Hutchinson ill at the time you conferred with him in 1938? A. No, not at all.

Q. How old was Mr. Hutchinson when he died, do you know? A. He was in his 70's and I believe he was near 75. I am not certain of that.

[420] Q. Your conferences with Mr. Hutchinson were in connection with preparing the original cost studies which have been introduced into this case, is that right? A. That is correct. The conferences were part of my efforts

to find out what had happened in the creation of the enterprise, and I also sought to obtain records that Hutchinson had, if any.

Q. Was it your expectation that the information you would secure would be used in supporting the company's original cost claims before the Federal Power Commission?

A. Yes, that was the reason.

Q. When you undertook to confer with Mr. Hutchinson, were you instructed to seek him out and confer with him?

A. Well, no, I cannot say that I was instructed to. I had worked for some time studying the documents that were in the company's files and had quite a number of documents, but up to that time and until after that time I had been unable to fit the documents together so as to make a complete story, so as a recall I requested permission to go to see all of the principals then living with respect to the McCall Ferry development and to find out from them what they knew about what transpired in the formation and development of the company, and as I recall Hutchinson was was the first one that I went to see because he was one of the men closest to the project.

Q. Of whom did you request this permission? [421]

A. Mr. Walls. Perhaps it may have been Mr. O'Connor. I don't recall which.

Q. Were counsel for the company consulted at the time you undertook these investigations? A. No, I don't believe they were. Well, they knew we were going ahead with that—just a moment. Do you mean were counsel consulted when I undertook these conferences or when I undertook the preparation of the data?

Q. When you undertook to seek out and interview these persons who were at one time connected with the McCall Ferry project. A. No, they were not consulted.

Q. Then as far as you know, no one considered the question of taking the depositions of the persons you were going to seek out and to preserve their testimony for the purpose of any proceeding you might have before the Fed-

eral Power Commission, is that right? A. I don't recall that that was discussed.

Q. Were you scheduled to see Mr. Hutchinson at the time you went down to Florida? I assume you did go down to Florida because your name appears as having been in Florida. A. That is correct. It had been two or three

months since I had seen Mr. Hutchinson and I had expected about a month before the time I went to see him that he would be in New York, and we had definite plans made to meet at that time [422] for further discussion of the development of McCall Ferry. However, he did not show up, and early in January, 1939, Mr. Rinehart, who was his personal lawyer, got in touch with me and told me of Hutchinson's serious condition and that if we wanted any further help from Dr. Hutchinson, that we should come to Florida.

[423] Q. At the time Mr. Rinehart contacted you, did he advise you that Mr. Hutchinson's illness was of such a nature that Mr. Hutchinson might not survive it? A. I don't think he just put it that way. I think he told me he was in very bad health, with some sort of an illness, and I don't recall that he said what.

Q. And, fearing that he might die before you secured the information, you went down to Florida to get a statement from him? A. That is correct.

Q. And, at that time, as far as you know, the question of securing Dr. Hutchinson's testimony by deposition to preserve it for the proceedings that might take place before the Federal Power Commission in connection with the company's original cost studies was not taken up? A. Was not taken up, at that time it would have been quite impossible to have done it.

Q. It was not impossible for you to get the affidavit, was it? A. No, the affidavit was drawn by Hutchinson's lawyer.

Q. It might have been possible to have gotten a deposition as well, isn't that so? A. If you had gotten it soon enough, yes.

Q. Tell me a little bit about how this statement, [424] signed by Mr. Hutchinson, was prepared. Did you prepare it? A. No, I did not.

Q. Did Mr. Rinehart prepare it? A. Mr. Rinehart prepared it.

Q. After consultation with you? A. After consultation with me and after I submitted to Mr. Rinehart a compilation of all of the facts that we had in our records, and those things which I had discussed with Hutchinson in previous conferences. All of those facts were submitted to Rinehart and I told Rinehart what the nature of the affidavit was we wanted, what we wanted it for, and the scope that I should like for him to cover in it.

Q. By "scope", you mean what you would have liked to have incorporated in the statement by Dr. Hutchinson from this memorandum you had, is that right? A. That is right.

Q. Did you leave the memorandum with Mr. Rinehart? A. I don't recall whether I did or not. It is not quite proper to call it a memorandum. What it in fact was—

Q. (Interrupting) Do you have it here? A. Not in Washington.

Q. Do you have it in Baltimore? A. Yes, I think I have it in Baltimore.

It was a description similar to parts of Exhibit 26, to [425] which was attached documentary evidence from our files, similar to the documents in Exhibit 27. It was a running description of what Hutchinson's connection with the project has been as revealed by our files, supported by such documents as were in our files, to establish what was the fact. It was in the nature of a factual statement.

Q. Did Mr. Rinehart show it to you before it was signed? A. I believe so; I believe I saw it.

Q. And were you satisfied with it or did you make any further suggestions? A. It seems to me that I made several suggestions as to the scope of it. He had not

covered enough points in it, or all the points, that I thought were necessary.

Q. Part 8 of Exhibit 27 is a statement of George C. Lee, a partner of Lee, Higginson and Company. Is Mr. Lee alive? A. Yes.

Q. Where does he live? A. In Boston, or rather in a suburb of Boston. He usually goes out of Boston for the summer. I don't know whether he has left yet, or not.

[426] Q. Part No. 9 contains a question and answer statement interposed by Mr. Fiske [Fisk]. Is Mr. Fiske alive? A. No, Mr. Fiske is dead.

Q. I notice the statement was taken in the Memorial Hospital in New York. A. Yes.

Q. Did he die soon after the affidavit was prepared? A. I believe it was a matter of months, something less than a year, but still a matter of months.

Q. What was the nature of his illness, if you knew? A. I believe he died of a throat infection, however, I am—if I am not mistaken—although I am not sure of that. I think it was a throat infection.

Q. Were you there at the time this statement was taken before the notary public, Wilton D. Cole? A. Wilton D. Cole was counsel. I was not present when his statement was taken. He was his counsel.

Q. Had you seen Mr. Fiske at any time or times before December 29, 1938? A. Yes.

Q. When? A. I discussed the early history of McCalls Ferry with him two or three times, I believe.

Q. That was two or three times in 1938? A. I believe they were.

[427] Q. Was Mr. Fiske well up in years when you first saw him? A. Yes. He was near 80, I would say.

Q. Were any discussions had looking toward the preservation of Mr. Fiske's testimony by way of deposition? [428] A. I do not recall that there was, although at the time the statement was taken from Mr. Fiske we

did not expect that he would die immediately, as was the case of Mr. Hutchinson.

. . .

TRIAL EXAMINER: Of that answer I will strike all of the answer except the first part of the statement reading "I do not recall that there was."

. . .

[429] Q. Will you tell me how the arrangements were made to take Mr. Fiske's testimony in the Memorial Hospital on December 29, 1938? A. I simply told Mr. Fiske's counsel, Mr. Cole, that we would like to have such a statement, and he made the arrangements. I do not know what arrangements were made.

Q. Let me see if I can follow through with the sequence of events. A. Yes.

[430] Q. Some time in 1938, prior to December 29, you saw Mr. Fiske two or three times to discuss the early history of McCalls Ferry Power Company.

Is that right? A. That is correct.

Q. After that conference, or at that last conference with him, did you secure a statement from him? A. From Mr. Fiske?

Q. Yes. A. Did I secure the statement?

Q. Yes. A. I did not.

Q. Were you scheduled to see Mr. Fiske prior to December 29, and subsequent to the last conference you had with him in 1938? A. No, I did not, because Mr. Fiske suggested at the last time I discussed the McCalls Ferry matter with him that I should in the future, take that matter up with his counsel, and he gave me the name of Mr. Cole.

Q. Subsequently, you did take it up with his counsel? A. Yes, sir.

Q. Do you recall when you took it up with Mr. Fiske's counsel? A. Oh, I would say it was within a few days, or perhaps a week or two within the last time that I talked to Mr. Fiske.

[431] Q. How long was that before December 29, can you tell me that? A. Several months.

Q. Is it your understanding that though you made a request of Mr. Fiske's counsel, Mr. Cole, for the statement several months before December 29, 1938, Mr. Cole waited until Mr. Fiske was in Memorial Hospital, to take a statement? A. No. I do not understand that to be the manner in which it took place. I did not understand your question. I understood you to ask me when did I take up the subject of McCalls Ferry with Mr. Cole in response to Mr. Fiske's request. I said a few weeks afterwards. I think it was several months before that, I had spoken to Mr. Fiske. When I spoke to Mr. Cole, and when Mr. Cole was requested to obtain this statement, some two or three months had elapsed, I believe after I had first taken up the Fiske matter with him, and he promptly secured the information.

Q. Did he tell you at that time that Mr. Fiske was ill? A. Yes.

[432] Q. You told him to go ahead and get the statement, anyway? A. Yes. I told him to go ahead and get the statement anyway.

Q. Did you go to New York, on that date, December 29, 1938? A. I do not recall. I doubt whether I did or not. If I did, it was not on Mr. Fiske's business, but some other matter.

Q. Did you prepare the questions which appear in Exhibit 27, Part 9? A. No, I did not.

Q. Did you prepare the compilation or memorandum for Mr. Cole's use in securing the answers which appear in Part 9 of Exhibit 27 for Identification? A. Yes, I did. I prepared a description of Mr. Fiske's connection with the enterprise, and supplied Mr. Cole with the documents from our records, supporting it.

Q. I think you did not see the document until it was signed, or rather until after it was signed and sworn to by Mr. Fiske? A. Yes.

Q. Mr. Cole mailed it to you? A. I believe it was mailed to me, as I recall.

Q. No. 21 of Exhibit 27 for Identification; that is, [433] that would be Part 21 of Exhibit 27 for Identification, appears to be the testimony of James H. Harlow regarding the value of McCall Ferry stocks and bonds.

Am I to understand that that testimony was given in 1907 in the Circuit Court of Cecil County, Maryland in a case entitled, "Susquehanna Power versus the Proprietors of Susquehanna Canal"? A. That is correct.

Q. Is this all of Mr. Harlow's testimony in that case? A. No. He gave a very great volume of that testimony, but that is all of the testimony relating to the value of those securities.

Q. Who made the selection from his testimony? A. I made it.

Q. Did you read all of his testimony in that case? A. I did not personally read it all. I instructed another person to read it and mark the references in the testimony to the McCall Ferry Power Company stocks and bonds, and the value thereof.

Q. I am advised that Cecil County, is Cecil County, Maryland? A. Yes, that is in the northern part of it, I do not think I identified this.

Q. Well,—I think the record is a little unclear [434] now, because you are pointing to something, and it will not show in the record. Do you mean that you examined only those parts of this witness's testimony which someone else in your Company has interpreted as relating to the cash value of the common stock at the time of its issuance; is that right? A. That is substantially correct; of course, I did read a certain portion of it.

Q. But you read, presumably, all of the testimony that was marked? A. I believe I did.

Q. Who read, presumably, all of the testimony that was marked for you to note? A. I do not recall. I think it was either Mr. Chase, or Mr. Bortner.

Q. I presume Mr. Harlow is dead? A. Yes, I believe he is dead.

Q. When did he die? A. Oh, he died several years ago. I never knew him.

Q. He was alive at the time you made your investigation? A. No. I do not think that he was. I think he died considerably before that.

Q. Just when did he die, before 1938? A. Yes, I think he probably died; well, I just do not know, but before 1938, yes.

[435] Q. Did you make any investigation to ascertain whether he was living at the time you were collecting all of these statements from those who had been associated with him during the early history of the Penn Water and Power Company? A. Yes, I ascertained that he was then dead.

Q. Turning to Part 24 of Exhibit 27 for Identification, that appears to be an affidavit of Mr. James G. Hopkins? A. Yes.

Q. Is Mr. Hopkins alive? A. I do not know. I have not inquired since this affidavit was taken.

Q. Who was he? A. Mr. Hopkins was a lawyer and a member of the firm of Conder Brothers. At the time the affidavit was taken in December, 1939, he was quite an old man, and he would only come to his office on more or less of a part-time basis.

Q. Mr. Aldred, whose statement is Part 46 of Exhibit 27 for Identification, died in 1946? A. No, I think it was 1945.

Q. 1945? A. 1945, if I recall correctly.

Q. Was it a year ago? [436] A. No, the latter part of last year.

Q. Again, in connection with Mr. Aldred's knowledge of the early history of the McCall Ferry Power Company, in [sic] [and] Penn Water Power Company, no effort was made, and no discussions were had, looking towards the

preservation of his testimony by way of deposition; is that right? A. I do not recall any.

MR. GOLDBERG: * * * I have scanned very casually these documents and apparently they are all intended to support the cash value of common stock issued by McCaill Ferry Power Company.

Let me ask the Witness if I am right about that.

A. Yes. They are not all limited to that, but that is one of the purposes of it.

[440] Q. Am I to understand that the amounts included in Accounts 100.3 and 100.4 in Exhibit 25 means that the company is claiming their inclusion in the rate base? A. Yes.

Q. Will you describe this electric plant for future use? A. The greater portion of this amount shown in this account consists of transmission line rights-of-way between Safe Harbor Electric Plant station and Lancaster, Pennsylvania, the remainder consisting of other sections of Rights-of-way to parallel the present existing Penn Water & Power transmission lines.

Q. When were these rights-of-way purchased? A. At various times.

Q. When was the first purchase made? A. Purchase of rights-of-way for the line between Safe Harbor and Lancaster, Pennsylvania, I believe was first begun about 1924, as I recall it.

[441] The other portions of the rights-of-way, that parallel the present lines, so shown by the map, were bought at the same time the original transmission line was put up.

Q. That was 1909? A. No, there are not very many of them on the Baltimore line. A considerable part of these extra rights-of-way are on the 230,000 volt transmission line from Ellizott City to Takoma Park substation, Washington.

Similarly, some more parts of the transmission line rights-of-way parallel the Safe Harbor-Perryville 132,000 volt single phase railroad circuits.

Q. Do you have the details of Account 100.4 here with you? A. 100.4. I do not believe I have it here with me.

(The witness examines his papers.)

A. I do not find it.

Q. You say you do not have it here with you? A. I do not find it.

Q. I think you told me that the earlier purchases that you recall of rights-of-way between Safe Harbor and Lancaster, Pennsylvania were made in 1924? A. Yes.

Q. When were the last purchases made? A. We are still making them.

[442] Q. When was the most recent one? A. Within the last few months.

Q. A very large purchase? A. I do not recall the size of it, Mr. Goldberg.

Q. Does the Company have any plans for the utilization of that right-of-way between Safe Harbor and Lancaster, Pennsylvania? A. Yes.

Q. What do those plans contemplate in the way of putting the line into operation? A. They contemplate building the line out of Safe Harbor to the north and northeast as the development may proceed.

Q. When? A. You mean what date?

Q. Yes. A. They do not contemplate the precise and specific date.

Q. It may be ten years hence or longer? A. I do not think it will be quite that long. However, I do not have any definite date in mind, and we do not have any definite date in mind.

Q. How about these rights-of-way paralleling existing lines of the Penn Water & Power Company? Are there any definite plans for the utilization of these rights-of-way? A. There are plans for the utilization of them, but [443] definite is quite a quantitative term.

Q. Is there any definite date set for the construction to begin? A. No.

Q. No cost estimates have been made for constructing such a line? A. I think there may have been, although I am not sure.

Q. As a rule you would probably begin making estimates when it was anticipated construction was imminent? Is that not so, in view of the rapidly changing prices? A. You might make them much before that, even.

Q. Does the Account 100.4 include property owned by Pennsylvania Water & Power Company above the Safe Harbor project? A. No.

Q. Does Account 100.3 include any property owned by Pennsylvania Water & Power Company above Safe Harbor? A. No, not that I know of. The property owned by Pennsylvania Water & Power Company being constructed from Safe Harbor, as I recall it, is in Account 110.

[448] Q. Does the Company make it a practice to capitalize interest during construction on construction work in progress? [449] A. Yes, the Company does.

[450] Q. On those items that you are charging interest during construction, do I still understand it is your intention to include the item itself in the rate base? A. Certainly. It will be in the rate base when we put it in 100.1, won't it?

Q. That will be Electric Plant in Service? A. Yes, sir.

Q. What does interest during construction represent? A. Income foregone.

Q. During the time it is not earning revenue, is that [451] right? A. Yes, and prior to the time it goes into commercial operation.

Q. So that you want to charge interest during construction during the time that it is not in service, and at the same time secure a rate of return or additional income by

reason of its inclusion in the rate base, is that right? A. Certainly.

Q. Even though interest during construction is to compensate the company for revenue foregone during the time that it is not electric plant in service, is that right? A. Yes, quite so.

. . .

[471]

WILLIAM F. UHL,

was called as a witness by and on behalf of the Respondents, being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION.

By MR. HOLL:

Q. Your name is William F. Uhl? A. Yes, sir.

Q. Where do you reside? A. Wellesley Hills, Massachusetts.

Q. And what is your profession? A. I am an engineer.

Q. Will you please state your educational qualifications and the experience you have had in your profession since graduation? A. I am a graduate of the Michigan State College, [472] 1902, with the degrees of Bachelor of Science and (sic) [in] Mechanical Engineer, and a degree of Civil Engineering. I am president of the firm of Charles T. Main, Inc., architects-engineers, at 201 Devonshire Street, Boston, Massachusetts.

Charles T. Main, Inc., carries on a general architectural and engineering business, consisting of consultation, investigations, reports, appraisals, designs, specifications for equipment and construction, and supervision of construction for industries, public utilities, municipalities and for state and federal government divisions.

I, personally, have specialized in hydraulic engineering and probably 50 per cent of my work in the past 43 years has been along lines of work where hydraulic engineering predominated.